Custom Products Group

Systems Business Unit

Information Guide

PN 154-628, Revision 1, May 18, 2012

CascadeMicrotech®

Contents

Cascade Microtech Custom Products

This document provides examples of products the Custom Products Group designed and built up to and through 2007. Many of the items are still being quoted and sold today.

Many new designs and enhancements have been quoted, designed, and shipped to our customers since 2007. Contact the Custom Products Group to discuss your customer's applications and requirements.

Basic Process

Gather as much information as possible about the application/requirement and discuss with your Cascade Microtech sales manager. The sales managers can help you make a determination about making a Custom Products Request.

The sales manager will decide who will fill out the online request form to proceed with the process, if required.

Type of information required for the custom products request form

- General customer information (contact and location)
- System configuration being discussed (required compatibilities, test equipment to be used with the system, etc.)
- As much detail as possible about the application/problem to be solved
- Budget and timeframe
- The customer's or the salesperson's suggested solution
- If it is a purchased item: make and model numbers

Definitions of categories of custom products

Unique/Large Integrated: High probability of one-off design typically requires high engineer content 20+hrs.

Buyout/OEM: Unique configuration with some non-price listed off the shelf purchased components. Little or no engineer content may have reasonable probability of repeat sales.

Small/Medium Integrated: Standard or non-standard accessories, including OEM products used a unique or non-standard configuration. Requires small to medium level of engineer content.

Packaging: Bundling or unbundling, standard or non standard parts. Little to no engineer content.

Repeat 'Standard Special': Re-quote or reorders for previously designed specials, these may need price, delivery and application verified before being allowed to re-quote.

Custom Product Pricing Guidelines

These should be discussed with your Sales Manager or a member of the Custom Products Group responsible for that given product type.

How are custom products are priced?

Most specials are one-off items (special or custom). Once a basic design concept is agreed upon, an estimated manufacturing cost is determined. This cost is marked up by a specified factor for general overhead costs and standard margin targets. R&D costs are factored in to determine the item's list price. R&D activities include design and drafting time, design review time, etc.

If multiple units are going to be ordered, then this R&D cost may be divided by the number of units to determine the per unit cost.

If Marketing concludes that the item will become a standard product, then R&D costs may be reduced (or not included in the price) and the price will be established by Marketing.

Why does a simple bracket cost $200-$500?

Most items are fully custom one-off items. Costs are derived primarily from R&D costs. The actual cost to manufacture is small compared to overhead costs. OEM pass-through items are marked up to cover the handling and overhead cost.

Can custom products be discounted for large system sale?

In all cases, custom products are priced as described above. The sales management team handles discounting and competitive issues, based on the situation and dollar values involved. The custom products group is not involved with these decisions other than as a consultant to Cascade management.

Stations

R1000

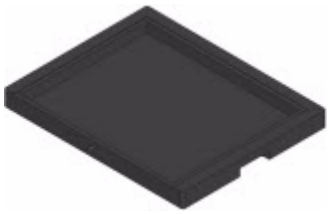
R1000 Large Area Probing Platforms (Board Test/Flat Panel Test)

SQ-108-807-08 — Dark Box and Vibration Isolation Table to 720 mm x 610 mm

- Back panel protrudes approximately 10 inches from a normally flat-surfaced panel to allow gantries to move back enough for optical viewing of chuck.
- Compatible with R1000-19 station with fixed chuck;
- No XY
- Sizes up to 28.5 inch X and 24.5 inch Y.

SQ-116-155-01 — Chuck, Backlight for SQ-R1000-19

- Chuck with fillister allows mounting a lighting source.
- Flat bottom surface enables vacuum to hold it in place.
- Chuck and fillister dimension to be specified at time of order. Typical fillister depth 2.5 cm.
- Compatible with SQ-R1000-19.



SQ-129-032-01 — Kit, Bottom Side Probing, R1000-19D

- Kit for bottom side probing on an SQ-R1000-19D or compatible station.
- Kit includes:
  - 70X video scope on vacuum base with XY fine movement control and course Z control for backside board probing.
  - Video scope includes color camera.
  - Two (2) aux chucks mounted on a variable height vacuum base (similar to SQ-115-331-02 base).
  - Four (4) extension arms for bottom side probing. (All arms are compatible with MPHM positioners.)

SQ-126-133-01 — Kit, Drop Down Arm, MH2 on SQ-R1000-15B/F

- Drop down arm assembly for MH2 positioner on the SQ-R1000-15B/F station.

Custom R1000 Stations Systems

SQ-R1000-15B — Large Area Manual Station, 26 inch x 21 inch

- Manual REL-1000 with Blanchard ground aluminum base.
- Design allows use of PCB holders SQ-115-331-01, and PCB bottom support SQ-115-331-02 vacuum mounts.
- Two moveable gantries (move X direction) with 3 each moveable platens (move Y direction) per gantry.
- Each platen can support two DCM or one MH5 positioners (vacuum or magnetic bases only).
- Station includes microscope gantry XY moveable, manual scope transport included (1 inch x 1 inch translation).
- No other options or accessories included.
- Add SQ-117-614-01 MMM/8 mount to R1000 brackets when using MH5 positioners with ACP or FPC probes.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit).

SQ-R1000-15F — Large Area Manual Station, 26 inch x 21 inch

- Manual REL-1000 with Blanchard ground aluminum base.
- Base has additional mounting holes in all 4 corners for the mounting of vacuum manifolds.)
- Design allows use of PCB holders SQ-115-331-01, and PCB bottom support SQ-115-331-02 vacuum mounts.
- Station has two moveable gantries (move X direction) with 3 each moveable platens (move 'Y' direction) per gantry.
- Each platen can support two DCM or one MH5 positioners (vacuum or magnetic bases only).
- Includes microscope gantry XY moveable, manual scope transport included (1 inch x 1 inch translation with friction lock on Y axis only).
- Includes cable strain relief for cables from positioners.
- No other options or accessories included.
- Add SQ-117-614-01 MMM/8 mount to R1000 brackets when using MH5 positioners with ACP or FPC probes.
- Denotes features added to SQ-R1000-15B to get to this configuration. [not sure what this means...?]

SQ-R1000-16B — Large Area Manual Station, 26 inch x 21 inch/16 inch x 16 inch, Theta Only,

- Manual REL-1000.
- Gantry for optics includes manual (1 inch x 1 inch translation) mount for VMS-60. Gantry translates XY over chuck surface.
- Chuck dimension = 16 inch x 16 inch
- Chuck flatness = ± 0.0002 inch (stainless steel)
- Vacuum zones (see Custom Products folder) controlled with 111-733.
- 16 inch x 16 inch chuck can be removed to allow easy upgrade to TPO315A style hot chuck using SQ-RAD-61-02 interface (not included).
- Station has two moveable gantries (East/West) with 2 each sliding platens.
- Platens can hold up to 3 each DCM size positioners.
- RAC-61 vacuum manifold included.
- No other options or accessories included.
- SQ-108-807-17 dark box/vibration table quoted separately.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit).

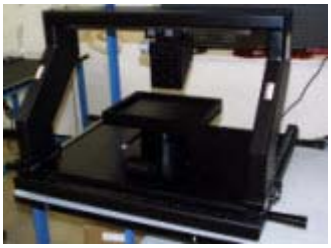
SQ-R1000-16B-2 — Large Area Station, 16 inch x 16 inch, Theta Only, Custom Chuck

- Manual REL-1000.
- Gantry for optics includes manual 1 x1 inch scope transport. Gantry translates XY over chuck surface.
- Chuck dimension = 16 inch x 16 inch
- Chuck flatness = ± 0.0002 inch (stainless steel).
- Four square vacuum zones (80 mm, 160 mm, 240 mm, 320 mm) controlled with 111-733.
- 16 inch chuck can be removed to allow easy upgrade to TPO315A style hot chuck using SQ-RAD-61-02 interface (not included).
- Station has two moveable gantries (East/West) with 2 each sliding positioner platens.
- Platens can hold up to 3 each DCM size positioners.
- RAC-61 vacuum manifold included.
- No other options or accessories included.
- Compatible with:
  - SQ-108-807-17 dark box/vibration table
  - SQ-123-197-01 (FS70/R1000 mounting kit), and
  - SQ-115-786-01 chuck
  - Backlight for SQ-R1000-16B
- All quoted separately.

SQ-R1000-16C — Large Area Station, Theta Only, No Chuck

- Manual REL-1000.
- Gantry for optics includes manual (1 inch x 1 inch translation) mount for VMS-60.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit).
- Optic gantry translates XY over chuck surface.
- Compatible with SQ-R1000-16B 16 inch x16 inch.
- Chuck (116-071) can be added or removed to allow easy upgrade to TPO315A style hot chuck (using SQ-RAD-61-02 interface (not included).
- Two moveable gantries (East/West) with 2 each sliding platens. The platens can hold up to 3 each DCM size positioners).
- RAC-61 vacuum manifold included.
- No other options or accessories included.
- Dark box/vibration table SQ-108-807-07 quoted separately.
- Compatible with backlight chuck SQ-115-786-01.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit).

SQ-R1000-16D — Large Area Station, No Chuck/ Positioner Gantry



SQ-R1000-16D with SQ-115-786-04 backlight chuck

- Manual REL-1000.
- Includes gantry for optics with manual (1 inch x 1 inch translation) mount for VMS-60.
- Optic gantry translates XY over chuck surface.
- Compatible with SQ-116-162-02 flat panel chuck assembly 16 inch x 16 inch with SQ-115-786-04 18 inch fillistered.
- Gross microscope gantry allows 20 inch x 20 inch viewable reach.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit).

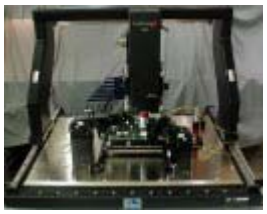
SQ-R1000-16F — Large Area Station, Board Holder, Theta

- Manual REL-1000 with optics gantry.
- Includes RSP-24 microscope transport, 2 inch, mounted on standard manual scope transport.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit) *or* 122-249 (AZoom mount)
- No programming capability is provided for the RSP-24. Cable diagram for RSP-24 motors and encoders are provided at time of order.
- PCB variable width clamp with dovetail mount for boards between 2- and 8 inches wide (SQ-118-920-01) on a Theta adjust pedestal.
- Two moveable gantries (East/West) with 2 each sliding platens.
- Platens can hold up to three DCM size positioners.
- RAC-61 vacuum manifold is included.

SQ-R1000-16G — Large Area Base Station, 16 inch x 16 inch

- Manual REL-1000 with Blanchard ground aluminum base.
- Compatible for testing boards up to nominal 16 inch x 16 inch depending on probes and probe placement.
- Gantry for optics translates XY over station base surface and includes manual 1 inch x 1 inch transport.
- Includes mount for Seiwa microscope)
- Two moveable gantries (East/West) with 2 each sliding platens.
- Platens can hold up to 3 each DCM size positioners (magnetic or vacuum).
- RAC-61 vacuum manifold included.
- No other options or accessories included.
- Compatible with:
  - SQ-123-197-01 (FS70/R1000 mounting kit)
  - Vibration table ACC-04
  - Dark box/vibration table SQ-108-807-07
  - Circuit board clamps and bullet supports
  - Bottom side probing kit SQ-129-032-01
- Contact specials group for application-specific items.
- All compatible items quoted separately.

SQ-R1000-16H — Large Area Station, Scope Gantry Only, Vert Board Holder

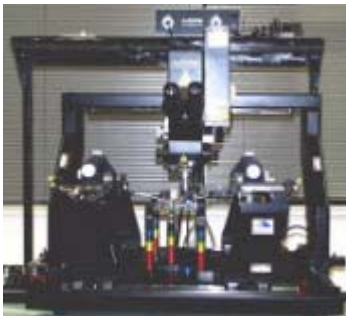


- Manual REL-1000 with Blanchard ground aluminum base.
- Gantry for optics translates XY over station base surface and includes manual 2 inch x 2 inch transport.
- Transport focus block provides 8 inches of vertical movement.
- Face plate enables vertical or horizontal microscope mounting.
- A-Zoom microscope mount included.
- RAC-61 vacuum manifold included.
- Station is compatible with and includes:
  - a vertical/horizontal board holder to hold up to 8 inch x 8 inch board by edge clamping.
  - T-slots with standoffs to mount larger boards with mounting holes.
- Includes 4 vacuum base height extension blocks to raise platen base level with board holder and/or raise up to three SQ-MPHV/(R/L)-VERT-01 positioners (not included).
- Includes 1 platen plate to place positioner in horizontal setup.
- Includes an adjustable bullet nose support for added support to backside of vertical area being probed.
- Base is drilled in front of station for adding boom stand.

SQ-R1000-17 — Large Area Manual Station

- Manual REL-1000 with Blanchard ground base.
- Design enables use of PCB holders (SQ-115-331-01 and PCB bottom support SQ-115-331-02).
- Bolt on stage SQ-115-330-(-01,-02,-03) keeps height from gantry platens to probing surface compatible with MH-2 positioners.
- Includes manual microscope RST-01 and gantry lock/stops.
- Compatible with vibration isolation table ACC-04, or with enclosure SQ-108-807-07.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit).

SQ-R1000-17B — Large Area Manual Station, Raised Gantry



- Manual REL-1000 with Blanchard ground aluminum base.
- Design enables use of PCB holders (SQ-115-331-01 and PCB bottom support SQ-115-331-02 vacuum mount).
- Gantry platens to probing surface compatible with MH-2 positioners.
- Includes manual microscope RST-01 and gantry lock/stops.
- Compatible with vibration isolation table ACC-04, or with dark enclosure SQ-108-807-07.
- Platens can hold up to three each DCM size positioners.
- Gantries raised to allow greater topography change on PCBs being probed.
- Base has pre-drilled holes for addition of chucks, or XY stages.

SQ-R1000-19 — Large Area Station, 720 mm x 610 mm, No XYZ or Theta

- Flat panel chuck permanently mounted to station.
- Optional back light chuck SQ-116-155-01 is held in place with vacuum.
- Not compatible with thermal upgrade.
- Vacuum zones are specified at time of order.
- Gantry for optics includes manual (1 inch x 1 inch translation) mount for VMS-60.
- Optic gantry translates XY over chuck surface.
- Station has two moveable gantries (East/West), each with two sliding platens.
- Platens can each hold up to three DCM size positioners.
- RAC-61 vacuum manifold included.
- No other options or accessories included.
- Dark box/vibration table SQ-108-807-08 are quoted separately.
- Compatible with scope mounting kit 122-249 (sold separately).

SQ-R1000-19C — Large Area Station, 8 inch x 8 inch Stage, Theta, 15 inch x 20 inches

- Manual REL-1000 has 2 chucks with circular dovetail mounts.
- Chucks mounts to an 8 inch x 8 inch manual stage with ±7.5 degrees of theta and nominal 0.5 inches of Z.
- Each chuck is 20 inches wide x 15 inches deep.
- One chuck has a Z height compatible with the SQ-PE5-32-6 probes for small geometry probing. Vacuum zones to be specified by customer at time of order.
- The second chuck's Z height is 3 inches lower than the first to accommodate the customer supplied backlight chuck that is to be 3 inches thick to keep the scope and probe working distances within working range.
- Two vacuum zones hold backlight chucks in place.
- Optics gantry includes a 1 inch x 1 inch scope transport.
- Optics gantry translates XY over chuck surface.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit) *or* 122-249 A-Zoom mount (not included).
- Two moveable gantries (East/West) each with sliding platens for large area probing.
- Circular bolt-on platens connect to the two sliding platens on each gantry and to enable eight MH2 size positioners to probe very small geometry.
- RAC-61 vacuum manifold included.
- Compatible with, but does not include SQ-PE5-32-06.

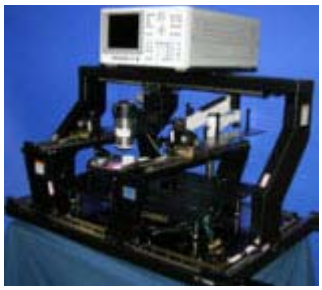
SQ-R1000-19D — Large Area Station, 26 inch x 21 inch, Bottom Side Probing

- Manual REL-1000 has capability of probing 26 inch x 21 inch deep boards.
- Station has two moveable gantries (East/West), each with sliding platens.
- Platens can each hold up to three DCM size positioners.
- Probing the opposite extremes of the top of the board requires moving the gantries to the center and orienting the probes to the outside of the station.
- The optics gantry includes a 1x1 scope transport that translate XY over the surface and includes an 8 inch manual focus block.
- Compatible with, but does not include SQ-123-197-01(FS70/R1000 mounting kit) *or* 122-249 (A-Zoom mount).
- Station includes the following:
  - RAC-61 vacuum manifold.
  - Accessory kit with 4 drop downs for top side probing. (All arms are compatible with MPHM positioners)
- Station requires the following items (not included):
  - SQ-115-335-0X (PCB hold down clamp) to hold circuit boards
  - SQ-115-335-0X (PCB bottom support, 6-32 bullet insert) to support board in the area of probing
  - SQ-129-027-01 (device holder, small substrate)
- Overall station footprint is a nominal 47 inches wide x 34 inches deep.
- Mounting holes allow for future addition of XY or pedestal stage.

SQ-R1000-19F — Large Area Base Station, 24 inch x 32 inch

- Manual REL-1000 with Blanchard ground aluminum base.
- Compatible for testing boards up to nominal 24 inch x 32 inch depending on probes and probe placement.
- Gantry for optics translates XY over station base surface and includes manual 1 inch x 1 inch transport.
- Scope mount must be ordered separately.
- Two moveable gantries (East/West), each with two sliding platens.
- Platens can hold up to three DCM size positioners (magnetic or vacuum).
- Probing opposite extremes of the top of the board requires moving the gantries to the center and orienting the probes to the outside of the station.
- RAC-61 vacuum manifold included.
- No other options or accessories included.
- Compatible with SQ-123-197-01 (FS70/R1000 mounting kit), circuit board clamps and bullet supports, bottom side probing kit (SQ-129-032-01), XY or pedestal stage, and various other accessories. (Contact Custom Products group for application specific items).
- Overall station footprint is a nominal 47 inches wide x 34 inches deep.
- All compatible items quoted separately.

SQ-R1000-19J — R1000 Station, Chuck with Z, PNA Mounts



- BTS2000 package provides mounting and ties the two positioner plates on one gantry into one unit for synergetic motion of the PNA and the positioner holding the probe.
- Includes Mount and low power focus mechanism for video scope (similar to SQ-133-588-01).
- Includes two kits for mounting an Agilent PNA head to one positioner gantry of an R1000 station.
  - Includes PNA or positioner.
  - Provides for mounts on both East and West positioner gantry's of the station.
  - PNA is oriented in a North-South attitude.
- Includes chuck assembly which mounts to the base of an R1000 station.
  - Chuck surface is large enough to hold an 18 inch x 24 inch circuit board utilizing vacuum based board clamps and bullet supports.
  - Chuck has an adjustment of 3 inches nominal. A vacuum base holds it in position on the station base plate and adjustable support posts under the edge of the chuck create additional stability.
  - No vacuum zones on chuck assembly.
- Includes fixed position instrument tray that can be mounted on top of the scope gantry.
- SQ-115-331-01 (board clamp) and SQ-115-331-02 (bullet support) for extra large boards support are ordered separately.
- The East/West separation of the probes has a range of 0.005 inches to 20 inches.

SQ-R1000-26 — Large Area Station, No Chuck or XY Stage

- No chuck or XY stage
- Two probe gantries each with three positioner mount platforms.
- Microscope gantry configured for a RST-24 microscope transport.
- Base plate hole pattern covers a 17 inch x 17 area (approx. 289 holes), similar to Newport SA series optical breadboard.
- DUT holder for both 10 inch x 10 inch and 16 inch x 16 inch boards is mounted to a slightly larger, 1 inch thick block of Teflon.
- DUT holder has a 7.5 inch cable exit hole in the center, similar to the R48 platen in reverse.
- Spacers raise all gantries by approximately 3 inches due to DUT stack-up.
- Strain relief for RF cabling.
- Compatible with SQ-123-197-01(FS70/R1000 mounting kit).

Board Test Systems (BTS)

Test Base

SQ-MTS-200-01 — MTS-200 Vertical Board Test Base, 2 inch to 8 inch

- Station with a vertical variable board clamp with a range of 2 inches to 8 inches.
- The clamp mechanism mounts DUT for 2 sided vertical probing and top sided only horizontal probing.
- Articulating microscope arm attached to a post positioned in the center of the back of the base.
- Includes a low power video microscope to enable viewing circuit board.
- Moveable height extension blocks raise platen base level for the board holder and up to 3 SQ-MPHV/(R/L)-VERT-01 positioners (not included).

SQ-MTS-200-04 — MTS-200 Vertical Board Test Base, 2 inch to 8 inch Plus

- MTS-200 station with a vertical variable board clamp.
- Edge clamping enables a vertical variable board clamp range of 2 inches to 8 inches.
- T-slots with standoffs enable mounting larger boards with mounting holes.
- The clamp mechanism mounts DUT for 2 sided vertical probing and top sided only horizontal probing.
- Articulating microscope arm is attached to a post positioned in the center of the back of the base.
- Includes a low power video microscope for circuit board viewing.
- Includes moveable height extension blocks to raise positioners (positioners not included).
- Includes an adjustable bullet nose support for added support to backside of vertical area being probed.

BTS Accessories

SQ-132-667-01 — Gantry, Top Plate Only, Vacuum Mount

- Vacuum-mounted gantry is mounted on two 131-906 vertical probe station spacer blocks.
- If additional height is required, order two additional 131-906 spacer blocks for each increase in height.
- Gantry is used to mount vacuum-based positioners
- Overall board width spanned is 18 inches.

SQ-133-155-02 — Vertical Station Bullet Support Assembly, Extended Reach

- Vacuum-based bullet support for probing boards in a vertical attitude.
- Plastic tip can be removed to bolt support directly to board using a 6-32 screw.
- Includes extensions enabling reach of up to 8 inches.

SQ-133-594-01 — Chuck, 2 inch Square, 2 Vacuum Zones, Stainless

- Stainless steel 2 inch square chuck with 2 vacuum zones.
- Inner vacuum zone has 5 pin holes patterned and sized the same as standard aux chucks.
- The second zone has pin holes in a square pattern measuring 30 mm.
- Number of second zone vacuum holes depends on the rigidity of the sample to be held in place.
- Chuck mounting holes are compatible with SQ-MTS-200-01.

Wafer Probing Systems: R48

SQ-R48/M-02 — R48/R61 Microwave Platen, Optical BB Holes Added

- Microwave platen (109-086) with 1/4-20 holes on a 1 inch x1 inch grid.
- The holes are used for optical breadboard applications.

SQ-R48-14 — REL-4800 Manual Station, Custom Platen

- Platen has additional machined opening (6.625 inch from CL x 5 inch W).

SQ-R48-16 — R48 Manual Station, Modified for Semicaps

- Includes 2 inch programmable scope transport, 8 inch programmable focus block and ECX-56 controller.
- Other features offer upgrade to thermal chuck, backside thermal kit and also include bridge modifications for extended microscope.
- Uses the -01 version of the BSP kit (BSK-01), thermal or non-thermal.

SQ-R48-17 — REL-4800 Manual Station, Raised Base

- R48 station with manual scope tilt/lift, raised base without chuck.
- Configuration provides additional height for custom holding fixtures and chucks that accept circular dove-tail mounts (Fixture height restrictions apply).
- Compatible with SQ-118-919-01 and SQ-118-920-01.

SQ-R48-22 — R48 Station, Without XY Stage Or Chuck, Base Modified

- R48 station without manual XY stage, theta and 8 inch vacuum chuck.
- Modified base supports the mounting fasteners of the added custom size (approx 9.5 inch x 24.5 inch)
- Newport optical breadboard.

SQ-R4822-01 — Manual Station, 8 inch, Thermal, 300°C, No Chamber, Special Chuck

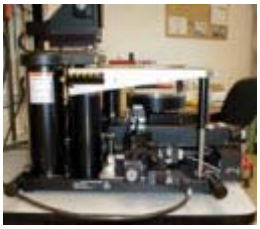
- BOM based on R4822HT.
- Includes additional 8 inch diameter non-thermal chuck with smallest vacuum zone for 1 inch diameter device.
- Includes 1 cm hole through chuck with fiber optic light source illuminating through hole.
- EM style chuck configuration except service loop for thermal exits back to allow easy change of thermal chuck to allow easy changeover from thermal to back-illumination chuck.

Wafer Probing Systems: R61

SQ-R61-11 — R61 Manual Station, Scope Transport, 6 inch Coarse X

- R61 station with a coarse x-axis scope transport that mounts between the bridge and the standard manual scope transport head.
- 6 inches of travel.
- Tilt back function is disabled by this transport.
- The x-axis adjustment uses a linear bearing with a friction screw to lock it in position.

SQ-R61-17 — R61 Station, 8 inch, Gold, S/A, Raised Custom Base



- Custom R61 with raised-based system.
- Four tapped holes in the base to allow for a bracket mounted DCM positioner under the platen (mounted to the base) on either side.
- Add SQ-116-613-01 if using DCM on base.
- The left side of the base has additional holes for mounting an MS1-8W positioner.
- Includes raised 8 inch gold plated vacuum chuck designed to be at normal platen to chuck height.
- Compatible with SQ-117-324-01 dovetail mount with planarization kit.

SQ-R61-18 — R61 Semiautomatic Station, Modified Platen, No Chuck

- Lithium Niobate modulator testing system.
- The platen requires holes drilled for SQ-114-845-06, SQ-114-845-07, SQ-DCM-208-01 (bolt down DCM positioner).
- All mounted on right side of platen.
- Mounting holes for 6-axis fiber optics positioner on left side of platen are required.

SQ-R61-19 — R61 Station, 8 inch, Nickel, Raised Custom Base

- Custom R61 is a raised based system.
- Left side of the base has additional holes for mounting an MS1-8W positioner.
- Includes raised 8 inch nickel-plated vacuum chuck designed to be at normal platen to chuck height.
- Four tapped holes in the base to allow for a bracket mounted DCM positioner under the platen (mounted to the base) on either side (add SQ-116-613-01 if using DCM on base).
- Compatible with SQ-117-324-01 dovetail mount with planarization kit.

SQ-R6131HT-01 — SR6131HT Station Platen Extension

- R6131HT station with modified platen for use with SQ-111-151-01 platen extension plate.

SQ-R6142-03 — R6142 Station, Modified

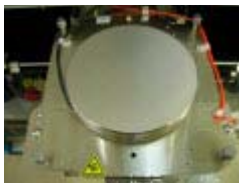
- Modified R6142 with an additional sub-platen shelf in front of the station.
- Sub-platen shelf tracks the XYZ movement of the chuck to hold a vacuum-based MH2 positioner.
- MH2 positioner allows a probe to maintain contact with a DUT held on the chuck surface while the chuck and/or platen moves.
- Possible reduced accuracy and repeatability of stage while the additional positioner is in place.
- Limited XY travel of stage with positioner in place.
- Positioner (ex: MH2/LV) and probe (ex: PE5-02) usable on the shelf to be quoted separately.

Wafer Probing Systems: Summit

SQ-S12101B-02 — Summit 12101B Semiautomatic Station Custom Chuck, 8 inch

- Nickel chuck with alignment pins to register the DUT board.
- Dedicated to board testing
- Maximum size for the DUT board is 5.65 inch x 5.65 inch (XY).
- Fits on 8 inch round chuck.
- Location of alignment pins must be submitted at time of order.
- Height of two aux chucks specified at time of order (dependent on thickness of customer DUT board).

SQ-S12101B-6-01— Summit 12101B Semiautomatic Station, 6 inch, Nickel, Saw Frame Support



- Summit 12101B-6 with supports for 11.7 inch x 11.7 inch wafer sawing frame.
- Includes aux chucks that must be removed while using the saw frame supports.
- While using the saw frame, customer must use software stops to restrict the XY movement of the stage to 6 inches (± 3 inches about the center point).
- Front supports must be moved to initialization position for station to initialize, and moved out prior to loading wafer sawing frame.

SQ-S12161B-6-01 — Summit 12161B-6 Semiautomatic Station, 6 inch, Thermal, Nickel, Custom Plate

- Uses platen cover with *no* mounting holes.
- Station is not compatible with any fixed mount positioners or probe card holder covers.

SQ-S12202B-01 — Summit S12202B Semiautomatic Station, Enhanced Shielded

- Enhanced shielded Summit S12202B.
- Enhancements for reduced noise over the dc to 1 MHz frequency range improve 1/F measurement noise baseline.
- Shielded top-hat is included.

SQ-S12741B-01 — Summit 12741B Semiautomatic Station, 8 inch, Pico-GT, Nickel, Custom Bridge

- Summit 12741B station with custom platen and enhanced high stability bridge.
- Programmable 4 inch scope transport.
- Platen and bridge are designed to be compatible with SQ-113-120-15, SQ-113-130-15, and (2)SQ-MS1-8S-02 in a 4-port configuration.
- Includes bridge.
- Requires ECX Box for the programmable transport.
- All other standard Summit 12741B specifications apply.

SQ-S12752B-HT-01— Summit 12752B-HT Semiautomatic Station, 8 inch, 300°C, Femto-GT, Gold, Custom Chuck

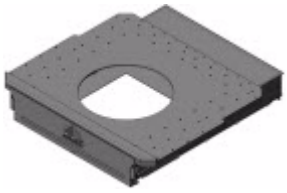
- Summit 12752B-HT has a top chuck surface with additional vacuum holes for thinned wafers.
- Compatible with 6- and 8 inch wafers.
- Added holes at the outside edge of the surface are coupled with the 3 (75mm) inch zone.

SQ-S12752B-6-01 — Summit 12752B-6 Semiautomatic Station, 6 inch, Femto-GT, Gold, Alternate SVC Loop

- Custom 12752B-6 station with alternate source for the triax cable in the service loop to support a specific application.

Wafer Probing Systems—S300 (300 mm)

SQ-S300-651-02 — S300-651 Station, Custom Platen



- S300-651 with a custom platen cover.
- Custom platen cover compatible with SQ-126-125-01 custom probe card holder.
- Requires standard platen cover (not included) to support standard probing.

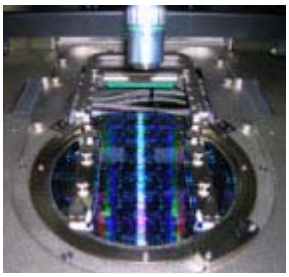
SQ-S300-651-05 — S300-651 Station, Custom Platen, FA

- S300-651 station with a custom High Rigidity platen and new platen mounting system (DSM).
- Designed for DC over temp testing and design/debug test applications.
- Compatible with SQ-126-125-02 and SQ-126-125-03 custom probe card holder.
- Requires a standard platen cover (not included) to support standard probing.

SQ-S300-651-07 — S300-651 Station, Custom Platen & Frame

- S300-651 with a custom platen cover compatible with SQ-126-125-01 custom probe card holder.
- Requires standard platen cover (not included) to support standard probing.
- Slots in the top side frame sections on both sides and holes in the side panels facilitate the cable routing from the DUT to test equipment along side the station.
- Compatible with SQ-132-000-02.

SQ-S300-651-09 — 300 mm Semiautomatic Station, MicroChamber, TCI, 200°C, Nickel, FA



- S300-651 station with a custom high rigidity platen and new platen mounting system (DSM).
- Designed for DC over temp testing and design/debug test applications.
- Compatible with the S300 Low Profile probe card holder.
- Does not include:
  - Platen cover for when the probe card holder is not in use
  - TopHat assembly
  - Any special drop downs for RF or DC probing
  - Any of the standard fixed positioner mounting holes

SQ-S300-652-01 — S300-652 Station, Custom Platen, FA

- S300-652 station with a custom high rigidity platen and new platen mounting system (DSM).
- Designed for DC over temp testing and design/debug test applications.
- Compatible with SQ-126-125-02 and SQ-126-125-03 custom probe card holder.
- Requires a special platen cover (not included) to support standard probing.

SQ-S300-653-03 — 300 mm Semiautomatic Station, MicroChamber, ERS, 200°C, Nickel

- S300-653 with a custom platen.
- Exit end of probe card cover is located at the left of the station (west) instead of at the back (north).
- Compatible with CMI standard S300 probe card holders.
- Platen does not have standard holes for mounting fixed positioners.

SQ-S300M-163DHT-01 — 300 mm Manual Station, 300°C, ERS, Nickel, Custom Platen

- S300M-163D-HT with custom platen using a larger cut out above the chuck to accommodate the customer probe card holder.
- Enables viewing of the entire probe card.
- The custom platen is dedicated to the customer probe card holder and is not TopHat compatible.

SQ-S300-653LP-01 — 300 mm Semiautomatic Station, MicroChamber, ERS, 200°C, Nickel, RH

- S300-653 with the overall height of the station reduced by 5.75 inches (approx. 14.6 cm).
- Reduced storage area in the bottom of the station.
- Custom platen with exit end of probe card cover is located at the left of the station (west) instead of at the back (north).
- Platen is compatible with CMI standard S300 probe card holders.
- Platen does not have the standard holes for mounting fixed positioners.

SQ-S300-653LP-HT-1 — 300 mm Semiautomatic Station, MicroChamber, ERS, 300°C, Nickel, RH

- S300-653-HT with the overall height of the station reduced by 5.75 inches (approx. 14.6 cm).
- Reduced the storage area in the bottom of the station.
- Custom platen with exit end of probe card cover is located at the left of the station (west) instead of at the back (north).
- Platen is compatible with CMI standard S300 probe card holders.
- Platen does not have the standard holes for mounting fixed positioners.

SQ-S300-653LP-HT-2 — 300 mm Semiautomatic Station, MicroChamber, ERS, 300°C, Nickel, RH

- S300-653-HT with the overall height of the station reduced by 5.75 inches (approx. 14.6 cm).
- Reduced the storage area in the bottom of the station.

SQ-S300-753-HT-02 — 300 mm Semiautomatic Station, ERS, 300°C, Femtoguard, L-pin, Nickel

- S300-series station with MicroChamber & high temperature FemtoGuard thermal chuck (ERS AirCool,Ni,L-Pins).
- Includes:
  - Integrated MicroChamber (dark, dry and EMI-Shielding)
  - Roll-out wafer stage & lift pins (for safe/easy wafer loading)
  - High-temp FemtoGuard triaxial chuck (range: 0/Amb.300°C)
  - Auxiliary chucks (2).
  - High stability platen with linear lift.
  - 4-axis precision motorized stage.
  - Nucleus Prober Control software.
  - Storage area for accessories, computer, or test equipment.
  - Built-in anti-vibration table (with castors & leveling feet).
  - User guides, tools, and accessories.

SQ-S300-862-06 — 300 mm Semi-Auto Station, MicroChamber, GT-TCI, 200°C, Gold, AT, LP

- Standard S300-862 station with lift pins (LP) in the chuck.

SQ-S300-974-HT-01 — 300 mm Semiautomatic Station, MicroChamber, ERS, 300°C, Gold, Attoguard

- S300-series (300 mm) semi-automatic thermal probe station.
- Includes:
  - MicroChamber
  - High-temp AttoGuard
  - FemtoGuard HT thermal chuck (ERS, Gold)
  - PureLine Technology
- Station compatible with SQ-118-155-05
- Includes high humidity condensation reduction kit and shielded TopHat.
- Use SQ-135-272-01 for the thermal controller (ordered separately).

Station Accessories

Station Accessories: 150 mm / 6 inch

SQ-RVC-07-00/6-01 — 6 inch Vacuum Chuck, Gold Surface

- RVC-07-00/6 with a gold plated surface.

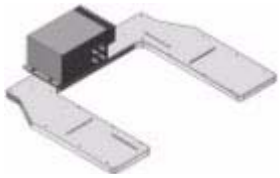
SQ-123-658-01 — High Isolation Add-on Surface, 6 inch, Non-Guarded

- High isolation surface for a 6 inch non-guarded chuck.
- Vacuum down surface and specific vacuum fittings.
- Add-on surface adds 0.267 inches to chuck height.
- Gold surface with vacuum grooves.

SQ-123-672-02 — Wafer Puck Fixture, 11/12K, Tape

- Puck /spacer picks up existing vacuum holes and supports a wafer suspended on a specific tape and ring carrier on a 6 inch chuck-equipped Summit 11/12K station.
- Nominal 170mm inside diameter and 6.0mm nominal thickness.
- Drawing of the customer dicing ring is required before the order will be accepted.

SQ-126-135-01 — Adapter Kit, 2520 RTH to 9K



- Adapter plate and hardware kit for mounting a Keithley 2520 Remote Test Head (RTH) on a Summit S910x station in the north position.
- A boom stand is required for microscope mounting.

SQ-133-619-01 — Device Puck Add-on, 9K, 1 Zone, 3 Devices, Custom

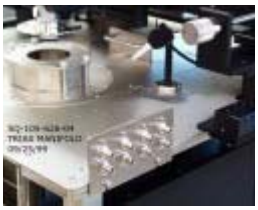
- Add-on puck for Summit 9101 station.
- Passes vacuum from the main chuck.
- One vacuum zone holds three customer devices at one time.
- Open vacuum holes must be covered if less than three devices are placed on the surface.
- Initial design holds three 0.625 inch (W) x 1.25 to 2.15 inches (L) devices.
- Includes spacers to raise two RF positioners to the same height as the add-on surface.

Station Accessories: 200 mm / 8 inch

SQ-105-626-03 — Side Mount Triax Panel

- Modified 105-626 Summit side mount triax panel.
- Mounts eight triax and four BNC feedthrough connectors.
- Lengthens the panel, but the mounting holes positions must be maintained.
- Intended for mounting onto an Alessi with MicroChamber.

SQ-105-626-04 — Triax Side Manifold Assembly, Summit 11/12K



- Slotted mounting holes enable panel mounting on back of platen.

SQ-105-635G-01 — Chuck Surface, 8 inch, GT, Gold, Custom Vacuum Holes

- Top chuck surface for Summit 12752B has additional vacuum hole for thinned wafers.
- Compatible with 6 inch and 8 inch wafers.
- Added holes at the outside edge of the surface are coupled with the 3 inch (75 mm) zone.

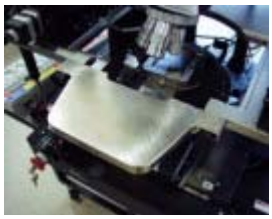
SQ-105-635G-02 — Chuck, 8 inch, Gold, Diced Wafer Carrier

- Gold plated top chuck layer for a Summit 12742.
- Notch around the perimeter enables use of a diced wafer carrier.
- Reduces available Z range by 3 mm.
- Overall chuck diameter is reduced to 7.6 inch.
- Surface is unable to support a guard ring.
- Compatible with dice wafer carrier with height of 0.236 inches and an inside diameter of 7.67 inches.
- Not recommended as an interchangeable part between setups.
- Aux chuck is 0.104 inch lower than the chuck surface. 116-344 is recommended (ordered separately) if the same height is required.
- Service call is required for quoting separately.

SQ-105-650-03 — TopHat Assembly, 8.01 inch OD, 12 Sides, Summit 11/12K

- Twelve-sided TopHat for use with Summit 11/12K probe stations (18.7 cm across flats on inside).
- Compatible with Summit high stability/large area optics bridge and boom stand configurations.
- Interchangeable with standard TopHat assembly.
- Requires special probe holders to extend reach inside TopHat.
- Requires RF positioners SQ-114-746-02 E/W and SQ-114-845-02 N/S.
- Use this P/N instead of SQ-105-650-01 and -02 versions for future orders.

SQ-111-151-01 — Platen Front Extension Plate, SQ-R61-07



- Platen extension for SQ-R61-07 probe station.
- Provides area for positioners in front of probe station.
- For use with SQ-R61-07 semi-auto probe station, REL-6100 module holder provides mounting capability for platen extension.
- Platen extension can be used for other Alessi (without MicroChamber) probe stations with modified platen.

SQ-114-468-01 — Large Area Optics Bridge Mount, 8 inch x 12 inch, Summit 11/12K

- Large area microscope bridge mount with 8 inch Y range.
- Includes:
  - Large area bridge with 12 inch x 8 inch XY transport
  - Easy glide linear Z-lift
  - Universal microscope counterbalance system
- Larger area bridge may restrict usable platen area for some applications.
- Existing X range is a nominal 11.5 inches.

SQ-114-643-02 — Triax Panel Assembly, Tilt Back Bridge, 24-Triax, 12K

- 114-643 triax panel assembly with 24 triax feedthroughs on both panels.
- No BNC feedthroughs
- Left panel includes shorting link assembly.
- Triax connectors not spaced for dual triax or quadrax.
- Pacing for up to 24 individual triax cables.

SQ-114-739-03 — High Stability Optics Tilt Bridge, 11/12K, 8517B

- Custom 114-739 high stability bridge mount with 8 inch space between the bridge mount and platen to accommodate an HP/Agilent 8517B.
- Minimizes cable length to minimize performance issues.
- The 8517B is supported by an independent structure not the probe station.
- Microscope transport Y-axis must be in the back end of travel position before activating scope tilt to avoid damage to the objective lens and/or probe station TopHat.

SQ-114-739-04 — High Stability Optics Tilt Bridge Kit, 2 inch Programmable Transport, 11/12K

- Kit consists of:
  - High stability optics tilt bridge
  - 2 inch XY programmable scope transport
  - ECX-56 high resolution controller
  - ERJ-02 joystick is used for motion control
  - Installation Instruction addendum
  - Summit PCS software does not support this option
  - Joystick ERJ-02 (included with ECX-56) is used for motion control
- The scope 2 inch XY travel is limited to 1 inch XY when using TopHat. Removing the TopHat allows full range.

SQ-114-739-05 — High Stability Optics Bridge,11/12K, Non-B

- High stability microscope bridge mount for similar to 114-739.
- Fits non-B versions of 11/12K stations built in 1999 or later.
- Pre '99 versions also require SQ-116-643-01 to fit correctly.
- Requires separate microscope mounting kit (not included).
- Compatible with SQ-117-621-01 mount for Olympus low-power microscope (not included).
- Contact the Custom Products group with the station's serial number to determine fit.

SQ-114-739-06 — High Stability Bridge, Summit 11/12K B-Version, No Tilt/No Transport

- High stability bridge with tilt mechanism and scope transport mechanism removed.
- Machined features removed from bridge.
- Side support post mounting holes to the and original tilt pivot rod cut-out in the rear remain.
- Used as a support base for the customer to add their own mechanism.

SQ-116-613-01 — DCM Base Plate Mount Bracket, R48-R61,

- Bracket mounts to four tapped holes in base to mount DCM positioners to the base under the platen (either side).
- Required on SQ-R6142-02, SQ-R61-17, SQ-R48-19 and SQ-R48-20 stations when configuring with DCM positioner for under-platen use.

SQ-116-643-01 — Large Area/Tilt Bridge Changeover Kit, 11/12K

- Kit requires replacement of 11K/12K side plates, and bridge support post.
- After installation, it enables use of:
  - 114-468 large area optics bridge mount, 6 inch x 8 inch
  - SQ-114-739-05 high stability bridge,11/12K (Non-B).
- Platen upgrades and/or field installation charges are not included. Estimate 8 hours.
- Required for Summit 11/12K stations built prior to 03/99.

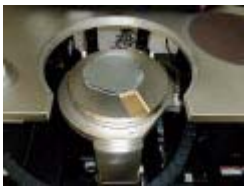
SQ-117-620-02 — TopHat Assembly, ACP 75/110M Probe, Tilt Back Scope

- Older revision of the Summit 11/12K TopHat assembly (smaller diameter-105-555), compatible with the Waveguide ACP75-M and ACP-75M series probes.
- Modified top to work with tilt-back microscopes.
- Includes four probe mounts.
- Required for use with Summit 11/12K probe stations configured with Waveguide ACP75-M and ACP110-M Series probes.

SQ-123-672-01 — Puck Fixture

- Puck/spacer picks up existing vacuum holes and supports a wafer suspended on a specific tape and ring carrier on a Summit 11/12K station.
- Drawing of the customer dicing ring is required before the order will be accepted.

SQ-129-649-01 — Puck Fixture, Nickel, Wafer Wand Slot,11/12K



- 8 inch nickel-plated puck with groove for vacuum wafer wand.
- For use with 11 or 12K station.
- The puck transfers vacuum from the chuck to the wafer.
- Not compatible with chucks with vacuum grooves.
- Puck is 4 mm thick and the groove/notch is the full thickness.
- Groove is compatible with a vacuum wand with a width of 36.1 mm and a thickness less than 4 mm.
- Puck is not compatible with thermal chuck.
- Groove depth must be specified at time of order.

SQ-129-652-01 — Aux Chuck Assembly, Microwave Absorber

- Aux chuck assembly for 11/12K station made of microwave absorbing material.
- Uses removable standard metal fences.
- Top surface is at the same nominal height as the main device chuck surface.
- Customer to specify location (front or rear) at time of order if ordered with a station. Otherwise, a service call is required for installation

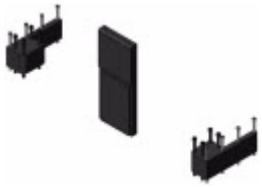
SQ-131-544-01 — Summit Upgrade Kit, 11/12K Non-B

- Upgrade kit for Summit 11/12K “non-B station” and original 114-468 large area bridge enabling station and bridge to use Agilent PNA 110 test heads.
- Upgrade kit includes parts required to raise bridge to clear test heads, and a drop-down mount for original FS-60 microscope.

- Positioners and adapter plates must support Agilent PNA 110 test heads.
- Positioners and adapter plates are defined before time of order and are subject to Custom Products group approval.
- Compatibility of specific station, bridge, and this part number must be verified before time of order.
- Service call to perform upgrade is quoted separately.

SQ-131-544-03 — Summit Upgrade Kit, 11/12K

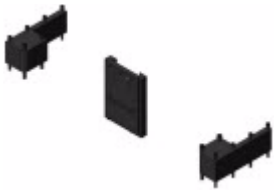
- Kit for a non-B Summit 11/12K with a high stability bridge.
- Kit includes:
  - Parts required to raise bridge 2 inches
  - Drop-down scope mount for A-Zoom microscope so it can focus on DUT (microscope not included).



- Not compatible with any other scope type.
- Requires a service call if upgraded in the field (not included).

SQ-131-544-04, 11/12K-B — Summit Upgrade Kit

- Kit for Summit 11/12KB station with a large area bridge.
- Kit includes parts needed to raise bridge 2 inches, and a drop-down scope mount for Seiwa (VMS-888) microscope.



- Microscope not included
- Not compatible with any other scope type.
- Requires a service call if upgraded in the field (not included).

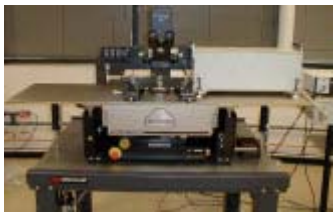
SQ-131-548-01 — Extension Plates, Summit 12K

- Pair of 12K platen side extension plates which attach to existing threaded holes on platen edges and extend a nominal 14 inches.

- Plates can overlap the edge as required, up to 1 inch, and supports a 5 pound load (coaxial accessories on customer supplied lab jacks) with no more than 0.25 inch deflection.
- Finish to be corrosion- or rust-retarding.

SQ-133-589-01 — Platen Extension, 11/12K, Lg Tuner Support

- Platen extension replaces the top of the existing platen on an 11/12K B version station.
- Extends the platen on both sides of the station.
- Sides are supported on each side for added support and stability.



- Requires 47 inch wide or greater vibration table.
- TopHat compatible.
- Compatible with SQ-114-845-03 and SQ-114-845-04. Probe mounts are provided.
- Incorporates the mounting holes for standard fixed mount positioners. Additional compatible probe mounts are ordered separately.
- Part number 126-645
- Full range of platen lift handle movement is restricted.
- Not probe card compatible.

Station Accessories: 300 mm / 12 inch

SQ-105-650-03 — TopHat Assembly, 8.01 inch OD, 12 Sides, Summit 11/12K

- Twelve-sided TopHat for use with Summit 11/12K probe stations (18.7 cm across flats on inside).
- Compatible with Summit high stability/large area optics bridge and boom stand configurations.
- Interchangeable with standard TopHat assembly.
- Requires special probe holders to extend reach inside TopHat.
- Requires RF positioners SQ-114-746-02 E/W and SQ-114-845-02 N/S.
- Use instead of SQ-105-650-01 and -02 versions for future orders.

SQ-114-643-02 — Triax Panel Assembly, Tilt Back Bridge,12K, 24 Triax

- 114-643 triax panel assembly with 24 triax feedthroughs on both panels.
- No BNC feedthroughs
- Left panel includes shorting link assembly.
- Triax connectors are not spaced for dual triax or quadrax.
- Pacing is designed for up to 24 individual triax cables.

SQ-120-168-01 — Large TopHat Cover Shutter, Summit 11/12K

- Converts Summit 11/12K large TopHat low power optics shutter to previous older sliding style.
- Shutter is hand-controlled from either the North or South positions on TopHat.

SQ-122-295-01 — Dual LCD Monitor Tray Assembly, S300

- Height adjustable assembly mounts two liquid crystal displays on any frame post of the S300.
- Field-retrofittable provided that nothing is mounted in the 2 holes at the top of the frame post.
- There is a separate tray and swing arm for each display.
- Slots on the base plate allow for addition of seismic restraints (not included).

SQ-124-513-01 — Probe-to-Pad Alignment System, S300

- Field retrofit kit for camera-assisted probe-to-pad alignment system for S300 includes:
- Upward-looking camera, lens, and user control panel
- Illumination system with integrated camera alignment
- PTPA alignment software module.
- Field upgrade kit for chuck roll-out and service loop upgrade.
- Nucleus software upgrade.
- The following items are required for a complete solution:
  - CMI digitizer
  - High stability microscope bridge mount
  - eVue digital imaging system (or high power microscope/video camera).

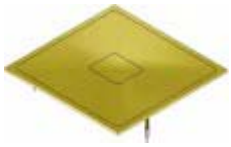
SQ-129-023-01 — Platen Extension Kit, Summit 9/10K

- Summit station purchased before 03/01/03 may need (4) 10-32 threaded holes modified. Modification requires tthat these holes are tapped through completely in order to accept mounting screws from the bottom side of the platen.
- Holes requiring modification are at the outside/front corners running through the depth of the platen.
- As of 03/01/03, order SQ-129-023-01.
- Kit includes 127-918 (10-32 tap), 127-919 (tap handle) and 127-921 (thread cutting past).

SQ-131-478-01 — High Stability Bridge, Tilt, 4 inch Programmable Transport, S300

- High stability microscope bridge mount for S300 with integrated 4 inch XY programmable transport.
- High stability bridge with air-assisted optics tilt-back
- Programmable 4 inch x 4 inch XY microscope transport
- ECA-53 expansion drive card (3-axis) for ECX-56, and cable

SQ-131-534-01 — Square Chuck Plate Add-on, 300 mm x 310 mm, Thermal



- Gold plated, copper alloy, easily removable, add-on surface for a thermal S300 station.
- Rectangular plate measuring 300 mm x 310 mm x 7 mm thick.
- Add-on surface reduces the overall Z travel range of the chuck.
- It is held on by vacuum while also passing vacuum for the groove vacuum zones on the surface.
- The thermal characteristics at the outside corners of the surface are on a best effort basis.
- Designed for MAX temperature of 200°C.

SQ-132-020-01 — Ultra High Stability Optics Bridge, S300

- Ultra high stability microscope bridge mount for S300 series.
- Ultra high stability bridge with air-assisted vertical lift.
- High stability precision 2 inch x 2 inch XY microscope transport.
- Ideal for probing very fine structures.
- Requires custom scope mount (contact Specials team).

SQ-132-020-02 — Ultra High Stability Bridge, Tilt, 2 inch Programmable Transport, S300

- Ultra high stability microscope bridge mount for S300 with integrated 2 inch XY programmable transport.
- High stability bridge with air-assisted optics lift.
- Programmable 2 inch x 2 inch XY microscope transport.
- ECA-53 expansion drive card (3-axis) for ECX-56, and cable.
- Requires custom scope mount (contact Specials team).

SQ-132-666-01 — Chuck Plate Add-on, 9.5 inch x 12 inch, Non-thermal, S300

- Add-on surface for a non-thermal S300 station.
- The plate is rectangular, measuring nominal 9.5 inch x 12 inches.
- The add-on surface reduces the overall Z travel range of the chuck.
- Add-on surface held on by vacuum.
- Boards are mounted using blind threaded holes in the top side. Exact placement of holes is specified by customer at time of order.
- A small cutout in the plate allows access to the cal/aux chucks.
- Customer design sign-off is required before manufacturing begins.

SQ-132-679-01 — Articulating Arm Mount, MOSAID 4205 Test Head, S300

- Articulating arm mounts a Mosaid 4205 test head to one of the 4 support posts on an S300.
- Two 1/4-20 tapped holes at the top of one post must be drilled and tapped to 3/8-16 (drill bit and tap are provided.)
- Height adjustment at the mounting point on the station as well as where the frame mounts to the test head.

SQ-133-615-02 — Non-thermal Chuck Kit

- Minimizes the possibility of a wafer skating off the back of the chuck during loading and unloading.
- Compatible with S300-571 station.
- Requires service call for installation.

SQ-133-618-01 — 18 inch TRAY Assembly

- Custom flat tray with a lip on all 4 sides.
- Tray measures 18 inches square with the pivot point centered on y axis, 7 inches from right side on x axis (see drawing for details).
- Compatible with the keyboard tray swing arm of part number 131-939.

SQ-135-281-01 — Platen Adapter, S300

- Square plate attaches to the top of the platen on an SQ-S300-651-07 station (or similar).
- Blanchard ground surface.
- Reduces hole in the platen from 18 inches to 6 inches
- Not TopHat compatible.
- Increases the platen top to chuck surface distance by 0.275 inches.
- Holes for East/West RF fixed mount SQ positioners (SQ-TBD).
- Compatible with magnetic or vacuum based positioners.
- The holes in the platen used for SQ-126-125-04 probe card holder are also used for attaching the plate. Registration pins in the bottom side aid alignment. (Probe card holder must be removed to install this plate.)
- Special drop down probe mounts (not included) may be required, depending on the positioner and application.

SQ-105-626-04 — Side Triax Manifold Assembly, 11000/ 12000

- Modified by slotting mounting holes to allow panel to be mounted on back of platen.

SQ-117-620-02 — TopHat Assembly, ACP 75/110M Probe, Tilt Back Scope

- Older revision of the Summit 11/12K TopHat assembly (smaller diameter 105-555) compatible with waveguide ACP75-M and ACP-75M series probes.
- Modified top works with tilt-back microscopes.
- Includes 4 probe mounts.
- Required for customers using Summit 11/12K stations configured with waveguide ACP75-M and ACP110-M series probes.

SQ-118-414-01 — Swing Out Keyboard/Monitor Stand, SQ-108-807-01

- Custom swing out monitor and keyboard-joystick-mouse stand.
- Mounts to SQ-108-807-01 table and dark box enclosure.
- Allows monitor and keyboard accessories to swing together for easy accessibility when dark box doors are open (and folded).
- Enables operator to make adjustments to probe station.
- Monitor is above and behind the keyboard at normal height in relation to the keyboard.
- For LCD flat panel displays only.

SQ-118-640-01 — High Stability Bridge Connection Panel, 300mm, 8 Dual Triax

- 16 each triax feed-throughs configured as eight dual triax.
- No BNCs.

SQ-118-640-02 — High Stability Bridge Triax/Coax Connection Panel, 300mm

- Two connection panels mount on each side of a high stability bridge on an S300.
- Each panel has 8 each triax feedthroughs configured as 4 dual triax and 2 each coax feedthroughs.

SQ-118-807-01 — Adjustable Height Pivot Mount, S300

- Pivot mount for monitor and mouse tray assembly on an S300 station.
- Multiple mounting holes at 1 inch spacing for height adjustment.
- Mounting holes enable positioning top of the pivot mount in 1 inch increments, even with the station frame up to 12 inches above the frame.
- Compatible with 118-770 and 122-295 (pivot mounting post only).
- Order monitor and mouse tray assemblies separately.

SQ-120-164-01 — RF-1 Boom Stand Option, Low Power Scope

- Can be installed at the factory or in the field.
- Replaces 1x1 XY scope transport.
- RF-1 must be configured with PN 111-716 column, low magnification for RF-1.
- Increases adjustability of low power scope over chuck surface.
- Includes installation instructions.

SQ-120-708-04 — Manifold, Connector

- Magnetic-based connector and vacuum connection panel for use on an S300 station using a large area bridge.
- Manifold has 10 each connector feedthroughs with the functionality of an ADBJ20-E2-BJ74 triax-to-coax adapter, and 3 individually switched vacuums.
- Electrical connection on the panel has an attached ground wire; it must be tied to the same ground point on the station as any other connection panel for proper electrical performance.

SQ-122-439-01 — Light-Tight Flexible Cover, S300

- Light-tight “dark” cover for S300 non-chambered probe station.
- Includes dark flexible material covering, internal frame, heat vents for thermal probing, and openings for probe station setup/use.
- Openings are provided for probe/positioner setup, microscope, wafer loading/unloading, and probe card DC cabling.
- When the cover is sealed, the microscope can be used with a special eyepiece opening.
- Access to platen lift, vacuum, and XY stage manual controls is also provided.

SQ-124-353-01 — Instrument Tray Assembly, S300

- Tray assembly mounts on the left side of an S300 station.
- Retrofit can be performed in the field provided nothing is mounted in the two holes at the top of each frame post on the left side
- Compatible with the Agilent 4294A instrument without keyboard.
- The instrument tray is fixed.
- Front of instrument to be a nominal 10 inches back from front edge of station.

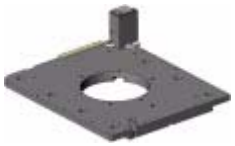
SQ-124-353-02 — Custom Swivel Instrument Tray, S300

- Tray supports up to 3 instruments weighing up to 100 lbs total, with the heaviest instrument on the top of the assembly.
- One adjustable shelf in the bottom 8 inches and provision to mount an instrument on top.
- Tray assembly mounts over either rear post of the S300, provided nothing is mounted to that post. It has the capability to swivel.
- The bottom of the tray assembly clears the high stability bridge with triax panels.
- All instrument positions have a surface with a lip, and provisions for strapping the instrument in place. Restraining straps for the instruments are not provided.
- The sides of the assembly are open for appropriate instrument air flow.
- Not compatible with SQ-132-020-01 or SQ-132-020-02. Use SQ-124-353-XX.

SQ-124-353-04 — Single Instrument Swivel Tray Assembly, S300

- Tray assembly mounts on the left side of an S300 station.
- Retrofit can be performed in the field, provided nothing is mounted in the 2 holes at the top of each frame post on the left side.
- Compatible with the Agilent 4294A instrument without keyboard.
- Tray swivels and has several swivel mounting points along the support bar. The support bar is height adjustable.
- The tray has a surface with a lip, and provisions for strapping the instrument in place. Restraining straps for the instruments are not provided.
- Mounting hole is at the front of the support bar for a standard keyboard/mouse tray (included). Usage of the keyboard mounting hole is dependent on the position of the instrument tray.

SQ-124-513-02 — PTPA System, A, S300



- Camera-assisted probe-to-pad alignment system for S300 semi-automatic station (factory installed).
- Upward-looking camera, lens and user control panel
- Illumination system with integrated camera alignment
- PTPA alignment software module (for Nucleus).
- The following items are required for a complete solution:
  - CMI digitizer
  - High stability microscope bridge mount
  - eVue digital imaging system (or high power microscope/video camera)

SQ-126-810-01 — Bracket/Mount, TPO-3000A

- Bracket/mount attached to back of the TPO-3000A system to hold refill funnel and overflow bottle.

SQ-129-017-01 — Adjustable Height Monitor Mounting Kit, Monitor Only, A, S300

- Ergonomic mounting kit for microscope hi-resolution video monitors.
- Monitor platform can be mounted to the left or right side of the S300 system (excluding locations used by the computer accessory mounting kit).
- Adjustable height range of 12 inches in 1-inch steps.
- Mounting arm allows free floating placement of the video monitor for easy viewing.

SQ-132-670-01 — Triax Manifold, 36 Connection Panel, Mag Base

- Magnetic-based triax connection panel.
- Not designed for any specific station configuration.
- Manifold has 36 triax feedthrough connections (female to female).
- Attached ground wire must be tied to a ground point on the station.
- No connection or alignment points for Quadrax.

SQ-RAC-90-01 — Side Triax Manifold for R32

- Four (4) each triax connectors designed for dual triax compatibility.
- Mounts to holes on left, bottom side of R32.

SQ-108-850-01 — Monitor Stand

- (1) Kinetic Systems #MS/1202/9100
- Stand size: 15 inch x 15 inch
- Compatible with 9100 series

SQ-133-590-01 — ERS Air and Central Lines Kit, 2.1 m, S300

- Includes 2.1 m air lines and control cables which enables placement of the ERS controller on the right side of the station towards the rear.
- These are additional lines and do not replace the original set of lines furnished with the controller.

SQ-131-477-01 — Large Area Optics Bridge, 12 inch x 12 inch, S300

- Large area bridge, similar to the 131-477, has a movement range of 12 inches in X and Y.

SQ-114-643-03 — 8 Dual Triax Panels, Tilt B-Bridge

- 16 each triax feedthroughs configured as 8 dual triax.
- No BNC's.

SQ-114-643-04 — High Stability Bridge Triax Connection Panel, HV, S11/12K

- Triax panel with 4 HV triax feedthroughs.

SQ-120-708-03 — Manifold, Connector

- Set of two magnetic-based connector and vacuum connection panels for use on an S300 with a large area bridge.
- Manifold has 10 each connector feedthroughs with the functionality of an ADBJ20-E2-BJ74 triax-to-coax adapter or equivalent, and 3 individually-switched vacuums on each panel.
- Two electrical connection panels have an attached ground wire. They must be tied to the same ground point on the station for proper electrical performance.

SQ-120-708-05 — Manifold, Coax

- A magnetic-based connector and vacuum connection panel for use on a S300 using a large area bridge.
- The manifold has 10 each connector feedthroughs with the functionality of a BJ28 coax-to-coax adapter, and 3 individually-switched vacuums.
- The electrical connection on the panel has an attached ground wire. It must be tied to the same ground point on the station as any other connection panel for proper electrical performance.

SQ-122-645-01 — R41/R32 Stage, 3 inch Hole in Plates

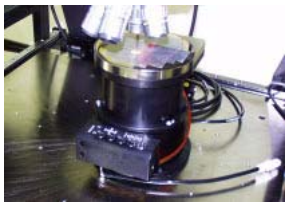
- R32 or R41 stage with a 3 inch hole cut through the center of the bottom mounting base and the top transit plate.

Station Accessories—R1000

SQ-116-673-01 — Vacuum Manifold Assembly, R-1000-16+

- Similar to RAC-61.'

SQ-115-330-03 — Stage, 6 inch Chuck, No XYZ, Bolt Down

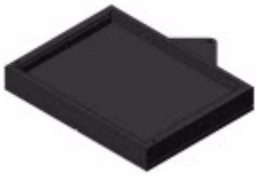


- Design compatible with SQ-R1000-17.
- Chuck based on RF1.
- Includes vacuum manifold for chuck zones.

SQ-115-786-01 — Chuck Backlight, SQ-R1000-16B

- Special chuck with fillister for mounting lighting source.
- Maximum chuck size 16 inch x 16 inch.
- Chuck and fillister dimension 16 inch x 12 inch.
- Typical fillister depth 2.5 cm.

SQ-115-786-04 — Chuck Backlight, SQ-R1000-16D



- Fillister cavity size 12 inch x 9 inch inside.
- Outside dimension 13.6 inch x 10.2 inch.
- Customer drawing in SQ folder.

SQ-124-343-01 — Non-Thermal Plated Chuck, 8 inch, Nickel

- 8 inch non-thermal chuck with nickel plated surface (similar to a 122-428).
- Includes theta adjustable pedestal for mounting to an R1000.
- Compatible with SQ-R1000-16C.

SQ-117-614-01 — MMM/8 Mount Bracket, R1000

- Drop-down bracket to allow MMM/8 microwave wave mounts on R1000 station.

SQ-118-409-01 — Chuck/Theta Device, SQ-R1000-15B

- 12 inch x 12 inch flat panel chuck with theta device for SQ-R1000-15B.

SQ-118-931-01 — MH2 Drop-down Arm Kit, R1000-17B

- Includes two drop-down arms and mounting hardware for use with MH2 positioners, and compatible probe arms for SQ-R1000-17B stations.
- SQ-R1000-17B comes with two drop-down arms.
- Order when using more than two MH2 positioners.
- Gantries are raised to allow for greater topography change on PCBs being probed.
- Arms allow for reaching PCBs mounted in lower positions.

SQ-129-032-02 — Positioner Based 70X Video Scope Kit, Low Power

- Standalone 70X video microscope mounted onto a custom vacuum base positioner with XY fine movement control and course Z control.
- Designed for viewing probes that are out of the reach of the main microscope.
- Includes color camera.
- Does not include monitor.

SQ-RAD-61-02 — Temptronic Interface, SQ-R1000-16B

- RAD-61 interface for SQ-R1000-16B.

DSM

SQ-131-039-01 — Scope Transport Kit, Manual Transport and Focus Block

- Manual microscope transport kit.
- 2 inch manual X/Y transport.
- 8 inch manual Z transport.
- For use with SQ-DSM-01 or SQ-DSM-02 only.

SQ-131-519-01 — 2 inch Programmable Scope Transport Kit, 8 inch Programmable Focus, 4 inch Quick Z

- Programmable microscope transport kit with Quick Lift.
- 2 inch programmable X/Y transport
- 8 inch programmable Z transport
- 4 inch manual Quick Lift
- For use with SQ-DSM-01 or SQ-DSM-02 only.

SQ-DSM-01 — DSM Manual Station, High Stability Bridge

- DSM-series AFM probe station.
- 8 inch manual stage.
- High stability construction with thick vibration dampening platen.
- 1/2 inch adjustable stage Z.
- Theta stage.
- Manual or programmable 8 inch microscope Z-lift (ordered separately).
- Compatible with manual or 2 inch programmable microscope transport.
- Tilt back bridge.
- 0.200 inch platen lift.

SQ-DSM-02 — DSM Semi-Auto Station, High Stability Bridge

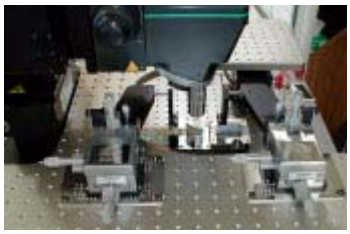
- DSM-series AFM semi-auto probe station.
- 8 inch programmable stage.
- High stability construction with thick vibration dampening platen.
- 1/2 inch adjustable stage Z.
- Theta stage.
- Manual or programmable 8 inch microscope Z Lift.
- 0.200 inch platen lift.

Light Wave Probe Station (LWPS)

SQ-127-168-02 — FS70 Mounting Kit, 2 inch Transport, LWPS

- Mounts Mitutoyo FS70 microscope (or equivalent) to 2 inch x 2 inch manual transport on a Light Wave station.
- Compatible with SQ-LWPS-04 when DUT surface is 30mm below bottom side of platen.

SQ-114-845-11 — RF Positioner, N/S 90°, Photonic Mount



- 114-845 positioner for use in a North or South position on a Light Wave station.
- Modified base mounts on a breadboard pattern (1/4-20 holes at 1 inch spacing).
- Lowered nose piece enables compatibiliy with stations that have the DUT surface 30mm below the bottom of the platen.
- Only one objective can be mounted in the turret at a time:
  - When used in the North position **and**
  - When station has a high power microscope with turret objective mounts.

SQ-120-703-01 — Optical Station, No Stage/Chuck/Scope Transport

- Optical station built on a Newport base 1500 mm x 600 mm with M6 tapped holes.

SQ-120-703-04 — Photonic Station, No Stage/Chuck/Scope Transport/Base

- Platen lift mechanism with Light Wave platen.
- Compatible mounting to a bread board base with a minimum dimension of 800 mm wide x 600 mm deep with a M6, 25 mm x 25 mm pattern. (not included)
- M6 holes on a 25mm by 25mm pattern.
- EMO switch is not included; station is completely manual.
- Vacuum switches and pressure regulator are included.
- Separation between base and bottom of platen is 180mm.
- Base, scope transport with mount, chuck, and stage are ordered separately.

SQ-120-703-06 — Optical Station, Manual Scope Transport, No Stage, Chuck

- Optical station built on Newport base 60 inch x 24 inch.
- Platen has 1/4-20 tapped holes on 1 inch spaced pattern.
- Station does not include a stage or chuck.
- The scope transport is a manual 1 inch x 1 inch.
- Scope mount ordered separately.
- Base to bottom of platen distance is a nominal 7-inch (180 mm).
- Platen is 0.75 inches thick and has a lift range of a nominal 0.1 inch
- Specifications are based on SQ-120-703-01.

SQ-124-346-03 — Device Holder, Custom Aux Chucks

- Dovetail mounting device chuck with 3 vacuum zones.
- Vacuum zone spacing defined by customer (see drawings for specifications).
- There are 3 aux chucks; one for a gold device and 2 for calibration substrates.
- Device holder is compatible with mount SQ-126-114-01.

SQ-124-346-04 — Device Holder, Custom Aux Chucks

- Dovetail mounting device chuck with 3 vacuum zones.
- The vacuum zone spacing will be 10mm, 20mm and 40mm.
- Device chuck is 8mm wide (for 10mm wide devices).
- Three aux chucks; one for a gold device and 2 for calibration substrates.
- Compatible with mount SQ-126-114-02.

SQ-124-351-01 — Stage, 200 mm, Single Axis, Metric Mount

- Single axis translation stage with a travel of 200 mm.
- Base mount is compatible with M6 holes on a 25 mm x 25mm square pattern.
- Includes controller and joystick.
- Similar to Newport (M-ILS200PP) stage.
- Compatible with Optical Station (SQ-120-703-01)

SQ-124-351-02 — Stage, 300 mm, Y-axis, Manual, Photonic, Metric Mount

- Single axis manual stage with lead screw and thumb screw lock.
- Mounting holes are compatible with an M6 25 mm x 25 mm breadboard.
- Travel range is 284 mm.
- Similar to Suruga part number B15-300.

SQ-124-811-01 — Scope Transport Assembly Joystick, 4 inch XY

- Motorized 4 inch “X” x 4 inch “Y” scope transport.
- DC motors are controlled by a single joystick.
- Compatible with optical station (SQ-120-703-01).

SQ-124-811-02 — Scope Transport and Base Assembly, 1 inch x 1 inch, Manual, Photonic

- 1 inch x 1 inch manual scope transport and mounting base for optical breadboard station.
- Base mounts to 1 inch x 1 inch 1/4-20 bolt pattern.
- Base includes a tilt-back.
- Compatible with SQ-126-121-01 and SQ-126-122-01; and also with a VMS-70.
- Does not include microscope or mount.

SQ-124-811-03 — Scope Transport and Base Assembly, Tilt-Back, 1 inch x 1 inch, Manual, M6

- Microscope mounts to an Light Wave station with breadboard base.
- M6 holes on a 25mm by 25mm pattern.
- Includes
  - Base mount
  - Air driven tilt back mechanism
  - 1 inch x 1 inch manual scope transport.
- Microscope and microscope mount are not included.

SQ-124-811-07 — Scope Transport and Base Assembly, 2 inch x 2 inch, Manual, Photonic

- 2 inch x 2 inch manual scope transport and mounting base for optical breadboard station.
- Base mounts to 1 inch x 1 inch 1/4-20 bolt pattern.
- Base includes a tilt-back.
- Compatible with SQ-LWPS-14.
- Microscope and microscope mount are not included.

SQ-124-936-01 — Device/Aux Chuck Assembly, Optical Station, Custom

- Custom chuck with device holders and aux chucks specified by the customer.
- Compatible with optical station (SQ-120-703-01)

SQ-126-114-01 — Planarizable Mount w/Theta, Photonic

- Mount attaches to stage top and supports a chuck or customer-specified device holder.
- Theta motion is 90° with locking mechanism.
- Compatible with SQ-124-351-01/02 (Y axis stages) and SQ-124-346-03 (custom device holder).

SQ-126-114-02 — Planarizable Mount w/Manual Z, Photonic

- Mount attaches to stage top and supports a chuck or customer-specified device holder.
- Z movement is 10mm (-7mm/ +3mm).
- Compatible with SQ-124-351-02 metric patterned stage.

SQ-126-121-01 — 6 inch x 6 inch Stage Assembly, Nickel, Chuck, Theta, Photonic

- 6 inch x 6 inch manual stage with standard 6 inch nickel chuck.
- Stage mounting base compatible with a breadboard 1 inch x 1 inch, 1/4-20 pattern.
- Z motion of 1 inch and Theta motion of 90° with lock.
- Breadboard mountable switch assembly for controlling vacuum zones is provided.
- Distance from top of breadboard base to chuck surface is a nominal 6.5 inch at center of Z motion.

SQ-126-122-01 — Fixed Position Stage, Adjustable Height, Photonic

- Fixed position stage mounts on an optical breadboard with 1 inch x 1 inch, 1/4-20 or 25mm x 25mm, M6 pattern.
- Top area of the unit is a nominal 4.375 inch x 6.5 inch.
- Adjustable assembly with an add-on surface ground steel plate for magnetic positioners.
- Height adjustment range is a nominal 1.75 inch.
- Compatible with magnetic base MPH chuck above platen positioner, SQ-126-121-01 (stage) and SQ-124-811-02.

SQ-129-012-02 — Bracket,Mount,INTEGRATING SPHERE TO Positioner

- Mounts integrating sphere (similar to ISP75-251 LED Flux Sphere assembly) to MH5 positioner.
- Planarization is accomplished by loosening the sphere to arm set screw and rotating the sphere.
- Sphere is held at an attitude for the LED emission to be down from the wafer.
- Compatible with SQ-LWPS-09.
- Sphere and the positioner are not included.
- Customer products group requires the sphere for design and manufacturing integration.

SQ-129-068-01 — MS1-8/LWS Adapter, Platen, English

- Adapter plate and hardware to mount MS1-8E or MS1-8W to a standard Light Wave station with breadboard.
- Includes adapter plate to mount a magnetic MPH to an English breadboard style platen.

SQ-129-075-01 — eralign SW, Stages, Controller

- Newport Integra/PCS installed and configured on LWS station controller.
- Enables Newport software to control either PM500 or VP25 automatic fiber align stages and the standard LWS DUT stage.
- Includes scripting examples to use Integra advanced fiber align algorithms, and adds algorithm to determine and display optical beam angle.
- Includes warranty and support.

SQ-135-304-01 — Replacement Platen Assembly, SQ-LWPS-14

- Replacement platen assembly for SQ-LWPS-14 is made of aluminum and has a black anodized coating.
- All other specs remain the same.

SQ-LWPS-04 — Lightwave Station, Theta Only, 2 inch x 2 inch Transport

- Optical station assembled on a Newport VH IsoStation with 4 inch thick base, 36 inch x 30 inch.
- Platen will have 1/4-20 tapped holes on a 1 inch spaced pattern.
- 2 inch x 2 inch manual scope transport
- 2 aux chucks for calibration
- Manual Theta mechanism mounts on Y stage (customer must provide Y-stage 2 weeks prior to shipment)
- 1 device holder (non thermal for modulator).
- Additional device holders can be ordered separately.
- Distance is 8 inches from the top of the base to bottom of platen.
- Platen is 0.75 inches thick and has a lift range of a nominal 0.1 inch.
- Microscope mount ordered separately.
- Station must be compatible with Newport Nano-Max 300 positioners and compatible with objectives up to 30mm diameter.
- Includes spacer blocks for positioners.

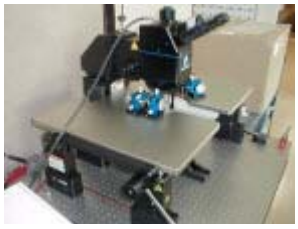
SQ-LWPS-06 — Light Wave Station, Y-Z-Theta Stage, 2 inch x 2 inch Transport

- Optical station built on a 36 inch x 24 inch Newport base.
- 1/4-20 tapped holes on a 1 inch spaced pattern.
- Smooth platen surface (no breadboard pattern).
- 2 inch x 2 inch manual scope transport
- Motorized 8 inch Y axis only stage
- Planarizable mount with motorized Z
- Manual Theta
- 2 aux chucks for calibration
- 1 device holder (non thermal for modulator).
- Platen is 0.75 inches thick and has a lift range of a nominal 0.1 inch.
- Microscope mount ordered separately.

SQ-LWPS-09 — Light Wave Station with Custom Stage

- Lightwave station with 2 inch x 2 inch manual stage.
- Interchangeable 2-inch chuck system with 2 chuck inserts.
- 2 inch round optical chuck with quartz window and 3 vacuum zones.
- 2- inch square chuck with 1 cm square vacuum zone and 0.5 cm square vacuum zone (each controlled separately).
- 2 inch x 2 inch manual scope transport (requires scope mount).
- Platen is similar to a 12K which does not have a breadboard pattern.
- Station base is 60 inches wide x 30 inches deep with a breadboard pattern of 1/4-20 tapped holes on 1 x1 inch square.
- Platen lift is a nominal 0.2 inches and the chuck surface is 30mm below the bottom side of the platen.
- Distance from top of breadboard base to chuck surface is to be specified at time of order.
- Customer must sign off on design before any parts are made. (Delay in sign-off will effect overall lead time and shipment.)
- Requires service call.

SQ-LWPS-14 — Light Wave Station, Thermal Chuck, Custom Platen



- Lightwave station with 4 inch thermal chuck and custom platen.
- 36 inch x 36 inch breadboard base (1/4-20 holes on 1 inch x 1 inch pattern) that is 4 inches thick.
- 4 inch thermal chuck (Amb -200C) mounted on a fixed bridge assembly to position the chuck between customers electro-magnet sitting on the base of the station. Chuck will have a small amount of gross theta adjustment. Chuck assembly will have no X-Y-Z movement capability.
- Smooth custom aluminum platen with riser blocks to position the bottom side of the platen 0.25 inches above the vertical posts of the customers magnet mechanism.
- Platen lift is a nominal 0.2 inches.
- Probe mount drop downs (if required) for 1 MPH and 4 MD positioners included.
- Compatible with SQ-124-811-04.
- Thermal controller to be ordered separately.

SQ-MH5/LB-01 — MH5 Positioner, Left, Breadboard Bolt Down Base

- Left MH5 with bolt down adapter plate for breadboard base with 1/4-20 holes on a 1 inch pattern.
- Mounting holes in the adapter plate enable locating the positioner assembly in smaller increments than the 1 inch pattern of the breadboard.
- Does not include an arm.
- Compatible with SQ-129-012-02 and SQ-LWPS-09.

System Accessories

Lab Accessories

Dark Box and Accessories

SQ-108-807-17 — Dark Box and Vibration Isolation Table, up to 18" x 20", R1000

- The dark box and vibration isolation table combination integrates a "modified ACC-04-styled" vibe ISO table and a "modified AER-55-styled" dark box.
- Compatible with R1000 stations with fixed chuck (no X-Y) up to sizes of 18" X and 20" Y.
- Enclosure has a back panel that protrudes approximately 10" from a normally flat surfaced panel which enables positioning gantrys for optical viewing of chuck.

SQ-111-570-01 — Dark Box Kit, Interlock, Laser, Class 1

- Upgrade kit to add interlock switches to a specific dark box to remotely sense if all doors are closed for safety reasons.
- Method of wiring termination from switches must be specified by customer.
- Suitable connector must be provided by customer if required by the Cascade Microtech factory.
- Kit is compatible with AER-55 dark box and all SQ-108-807-xx vibe table/dark box combinations (ordered separately).
- Factory install only.

Vibration Isolation Tables and Accessories

SQ-106-253-06 — Vibration Isolation Table, Heavy Duty, KSI 1202 w/Casters

- Heavy duty table (106-253) with a set of 4 retractable casters.

SQ-104-050-01 — Vibration Isolation Table, 36X47 with Casters and Monitor Stand

- Standard 104-050 vibration table with additional Kinetics system options:
  - Casters (CR)
  - Monitor stand (MS).

SQ-120-424-01 — Vibration Isolation Table, TMC, Tall, 63-500 Series

- Custom version of a TMC 63M-561 table.
- Customer is responsible for vibration isolation table installation using their on-site facilities. The table may require special handling due to it's weight and size.
- Included items:
  - MaxDamp option
  - Additional 1.75" height option to allow a Keithley model 8000 rack to slide below the table.

SQ-118-930-02 — Kit, Guard Rails, GR-36, 9100 Series Vibration Isolation Table

- Front and rear guard rails included.
- Compatible with 36" width 9100 Series Kinetics vibration tables.
- Kinetic Systems P/N: 9100/GR-36

AER Accessories

SQ-108-295-03 — Knockout Panel with 24 BNC Feedthroughs

- Knockout panel for AER-XX
- 24 BNC Feedthroughs

SQ-127-171-01 — AER55 Side Cable Exit Panel

- Panel enables cable to exit through the side of the AER-55 Light tight box.
- The panel replaces one of the removable panels on either side of the box.

Service

SQ-133-608-01 — Thermal Probe, 300°C, Model 126K

- Anritsu model 126K self supporting thermal probe.
- Maximum temperature 300°C.
- Thermocouple protected by teflon guard and performs small heat absorption from the surfaces.
- Compatible with SQ-133-607-01.
- All warranties are through the manufacturer.

SQ-133-607-01 — Digital ThermoMeter, Single Input, Type J-K-T

- Omega model HH21 Digital ThermoMeter.
- Accepts type J, K and T inputs.
- Includes soft carrying case.
- All warranties are through the manufacturer.

Optical

SQ-118-932-01 — A-Zoom Microscope, 40X, w/FC Laser Input

- Custom 108-790 (40X) A-Zoomwith Opto/Mech design without NavCam
- Ready to accept one 62.5um core fiber.
- Wavelengths are 1.3 and 1.55nm.
- Numerical aperture to be accepted from fiber is nominally .067.

SQ-127-180-01 — Fiber Optic Beam Spotter Device

- Device combines a 650 nm light with an 850nm to 1750nm optical test signal.
- Used to spot signal location on the device.

SQ-127-181-01 — Optical System, Lightwave Station

- Custom Optem manual optical system (similar to RL011001).
- Use A-Zoom mounting kit for the scope transport being used on the station.
- Includes:
  - Manual focus block
  - Dual Objective Slider
  - NIR Z70XL side port w/FC connector (variable spot size)
  - Special BS
  - Coax
  - FO cable
  - Custom supports,
  - FO Lamp house.
  - Does not Include objectives.

SQ-129-063-01 — Lightwave Station, Custom Config, Modified Demo

- Includes the precision platen lift mechanism, English breadboard platen, scope transport mount.
- Mounted onto large 5 foot x 2 foot english breadboard.

SQ-129-064-01 — Scope Transport, 2-inch, Programmable, Modified

- Programmable 2-inch scope transport for increased payload microscopes.
- Requires:
  - ECX-56-D motion controller
  - ECA-53 motor controller expansion card
  - Nucleus 2.1 or higher or Galaxy software.

SQ-129-065-01 — Stage Assembly, YZT & Holder, No Controller

- Device stage for LWS.
- Does not include motion controller or software.
- Motorized Y- and Z-axis, Manual theta-axis.
- Uses Newport ILS and UZM motorized stages.
- Theta stage has dovetail receiver to accept standard LWS device holder.

SQ-129-066-01 — Platen Lift Kit, Scope, PM500, VP25, LWS Demo

- Lift kit for demo LWS enables mounting PM500 or VP25 Newport fiber align stages.
- Raises the platen lift mechanism and scope transport to the proper height.

SQ-129-067-01 — Thermal Device Holder, Modulator, No Controller

- Thermal modulator holder with integrated TE cooler.
- Accomodates DUT size of 0.67in x 0.74in.
- Vacuum hold down.
- Fits into standard LWS dovetail receiver.
- Requires thermal controller.

SQ-129-071-01 — Controller, Motor, 2-axis, MM4006, Modified Eng Demo

- Special motor controller for standard 2-axis DUT stage on the LWS.
- Uses the Newport MM4006 controller as the base item.
- Drives ILS and UZM and VP stages.
- Front panel and GPIB communication.
- Requires configuration to the specific stages being controlled.

SQ-FTL3-CLV-MM — Fiber Optic Pigtails, Multi Mode, Cleaved

- Package of three Fiber optic pigtails, multi mode, cleaved, for use with either the SQ-120-706-01 or SQ-120-714-01 light wave probe.

SQ-FTL3-LEN-MM — Fiber Optic Pigtails, Multi Mode, Lensed

- Package of three fiber optic pigtails, multi mode, lensed, for use with either the SQ-120-706-01 or SQ-120-714-01 light wave probe.

SQ-FTL3-LEN-SM — Fiber Optic Pigtails, Single Mode, Lensed

- Package of three Fiber optic pigtails, single mode, lensed, for use with either the SQ-120-706-01 or SQ-120-714-01 light wave probe.

SQ-113-120-04 — 8510XF Positioner,West,optic Mnt, 2 Arms(W/s)

- Manual 8510XF Positioner for the West side of a Optical Platen with M6 holes on a 25mm spaced pattern.
- Holes in the base enable mounting in the normal west position (facing east), as well as a farther south position for using the north facing probe arm.
- Includes 2 probe Mounting arms: one normal west position (facing east) and one 90° south (facing north).
- Drop down distance for both arms is compatible with SQ-120-703-01.
- The probe mount on the south arm is designed for side by side ACP-L Probes with a 23.5mm spacing.

SQ-113-130-04 — 8510XF Positioner, East, Optical,2 Arms (E/S)

- Manual 8510XF Positioner for the east side of a Optical Platen with M6 holes on a 25mm spaced pattern.
- Holes in the base enable mounting in the normal east position (facing west), as well as a farther south position for using the north facing probe arm.
- Includes 2 probe mounting arms: one normal east position(facing west) and one 90° south (facing north).
- Drop down distance for both arms is compatible with SQ-120-703-01.
- The probe mount on the south arm is designed for side by side ACP-L Probes with a 23.5mm spacing.

SQ-120-420-01 — Microscope Mount, BX-30

- Assembly used for mounting an Olympus BX-30 microscope on a R48, R61 or Summit 11/12K with 1" manual scope transport.
- Consists of a female dovetail interface and a z adjust screw.
- Not compatible with Summit 11/12K with the programmable scope transport—use SQ-120-420-02.

SQ-120-420-02 — Microscope Mount, BX-30

- Assembly used for mounting an Olympus BX-30 microscope on a Summit 11/12K with 2-inch programmable scope transport.
- Consists of a female dovetail interface and a z adjust screw.
- For 1" manual scope transport, use SQ-120-420-01
- Add caution label close to the lift handle to warn about scope objective bell interference with objective turret.

SQ-120-714-01 — Lightwave Probe/Guide, Horizontal

- Horizontal Light Wave Probe for use in a Summit 11/12K top hat assembly.
- Adjustable angle setting enables a zero degree angle of attack (i.e., at a right angle) to the device being probed.
- Mountable on a standard Summit 11/12K RF probe arm.
- Compatible with either a new TBD length FC connectorized "pig-tail" fiber tip or a continuous fiber.

SQ-122-644-01 — Lightwave Probe/Guide, No Connector,90°

- Modified Light Wave Probe / Fiber Holder for use in a Summit 11/12K top hat assembly.
- Adjustable angle setting to enable a zero degree angle of attack (i.e., at a right angle) to the device being probed.
- Mountable on a standard RF probe arm.
- Uses a continuous fiber, as opposed to a "pig-tail" fiber tip.

SQ-124-348-02 — Photonics Probe, Optical, Relay Lens, Off-Axis Camera Option

- Option for a 1:1 relay lens and off-axis camera for mounting inside the SQ-124-348-01 Optical Probe.
- Mounts collimator horizontally inside a flexure for tilt adjustment
- Passes light through a 1:1 relay lens to the DUT.
- Includes an off-axis camera with 2mm field of view and LED lighting, 12VDC.
- 9-inch black and white monitor is supplied.

SQ-129-074-01 — Optical Probe Bracket Assembly, PM500

- Bracket and hardware for mount ing SQ-129-072-01 optical probe onto the Newport PM500 automatic fiber align stage for the standard LWS.

SP-LWP-LEN50-MM-01 — Standard Lightwave Probe with FT-LEN50-MM

- When used in the larger 11/12K top hats, this probe requires an alternate bracket that is included in the accessory kit.
- Due to compatibility issues with the large top hat, reduced mobility and reach will be encountered.

Thermal

Thermal Accessories

Thermal Chucks

SQ-108-798-01 — 6-inch Chuck, Thermal, 0 to +200°C

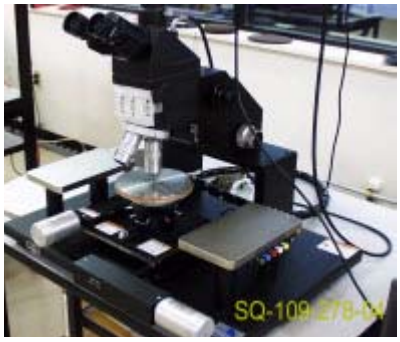
- For Temptronic 3010B.
- For replacement chucks, use CS-108-798-01.

SQ-108-798-03 — 6-inch Thermal Chuck, Gold, 0-200°C CB0614J2S000G1

- Compatible with TPO 3010B.
- For use with TPO-3210B series controller, 'Y' cable adapter 109-936 is required.

SQ-109-278-04 — 6-inch Chuck, Nickel, 0 to +200°C, TP0-315A

- RAD-08 is required for mounting on Alessi.



SQ-109-278-06 — 6-inch Chuck, Nickel, 0 to +300°C, TP0-315A

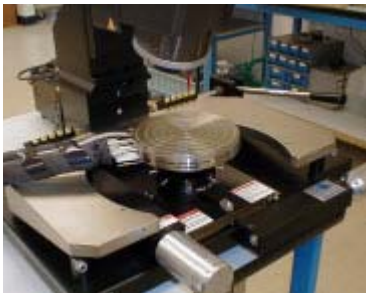
- RAD-08 is required for mounting on Alessi.
- Vacuum grooves.

SQ-117-317-03 — Adapter, 6-inch Chuck, Gold, 0-300°C, w/Aux, Dovetail Mount

- 6-inch gold thermal chuck with auxillary chucks for holding calibration substrates.
- Auxiliary chucks are not heated.
- Additional multi-zone vacuum manifold provides additional vacuum control for aux chucks.
- Controller is not included.

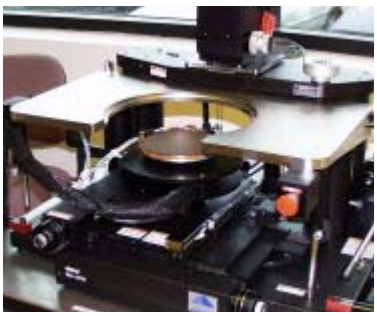
SQ-117-317-01 — Chuck Kit, 0 to +200°C, for SQ-R61-06, TPO-315 Compatible

- 6-inch nickel thermal chuck kit with auxillary chucks for holding calibration substrates.
- Auxiliary chucks are not heated.
- Additional three zone vacuum manifold provides additional vacuum control for aux chucks.
- Controller is not included.



SQ-117-317-01 — Chuck Kit, 0 to +200°C, for SQ-R61-06, TPO-315 Compatible

- 6-inch nickel thermal chuck kit with auxillary chucks for holding calibration substrates.
- Auxiliary chucks are not heated.
- Additional three zone vacuum manifold provides additional vacuum control for aux chucks.
- Controller is not included.



SQ-117-317-02 — 6-inch Gold Chuck Adapter, 0 to +200°C, w/Aux, Dovetail Mount

- 6-inch gold thermal chuck with auxillary chucks for holding calibration substrates.
- Auxiliary chucks are not heated.
- Additional multi-zone vacuum manifold provides additional vacuum control for aux chucks.
- Controller is not included.

SQ-118-420-01 — Thermochuck, 6-inch, Au, 0 to +300°C,Vacuum Holes, TP0315

- Gold 6-inch thermal chuck with vacuum holes (not grooves).
- TPO315 controller sold separately.
- Chuck zone for 3-inch wafers.

SQ-124-339-01 — 6-inch Thermal Chuck, Nickel, Ambient to +200°C, High ISO

- 6-inch nickel plated ambient to +200°C thermal chuck with add-on high isolation surface.
- Integrated service loop is not included.
- Adapter must be ordered separately for mounting chuck to station. Contact Specials Group for information on adapter compatibility.
- TPO315A controller is required and must be ordered separately.

SQ-132-675-01 — 6-inch Chuck, Nickel, -65 to +200°C, High Isolation,for use w/ TP03000A SVA

- 6-inch -55 to +200°C thermal chuck.
- Compatible with controller TPO3000A ONLY (not included).
- Three separately controlled vacuum zones.
- Nickel-plated surface plated with pin holes for vacuum.
- Top layer is isolated from the rest of the chuck.
- Chuck is compatible with SQ-114-455-03, or (RAD-08 with SQ-105-034-01).
- Service loop has no support mounts and is spiral wrapped into a bundle.
- While the chuck has the capability to go cold, the lowest temperature that the chuck may obtain without frosting will be determined by the environment immediately around the chuck.
- The chiller starts pumping coolant at 40C.
- An environmental compartment may be necessary for full range operation.

SQ-133-382-01 — Upgrade Kit, Chuck/Service Loop, 8-inch, ESPEC

- Kit enables retrofitting Summit 12861B station with an ESPEC Chuck (not included).
- Kit will be assembled as much a possible by manufacturing.
- Final assembly of chuck and service loop completed at Cascade Microtech.
- Service call required for installation.

SQ-108-486-02 — 8-inch Thermal Chuck Upgrade, 0 to +300°C, Nickel, Non-Guarded

- 8-inch 0 to +300°C, nickel-plated, non-guarded thermal chuck.
- Integrated service loop is not included.
- Adapter must be ordered separately for mounting chuck to station. Contact Specials Group for information on adapter compatibility.
- TPO315B controller is required and must be ordered separately.

SQ-108-487-01 — 8-inch Thermal Chuck, AMB-300, NI, Non-Guarded

- 8-inch ambient to +300°C, nickel-plated, non-guarded thermal chuck.
- Integrated service loop is not included
- Adapter must be ordered separately for mounting chuck to station. Contact Specials Group for information on adapter compatibility.
- TPO315A controller is required and must be ordered separately.

SQ-108-490-01 — 8-inch Thermal Chuck Upgrade, Nickel, 0 to +200°C, Non-Guarded

- 8-inch 0 to +200°C, nickel-plated, non-guarded thermal chuck.
- Integrated service loop is not included
- Adapter must be ordered separately for mounting chuck to station. Contact Specials Group for information on adapter compatibility.
- TPO3010B controller is required and must be ordered separately.

SQ-108-558-01 — 6-inch Thermal Chuck, 0 to +200°C

- 6-inch thermal chuck, 0 to +200°C, gold, for TP3010 controller.

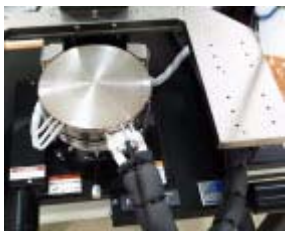
SQ-109-000-01 — 6-inch Temptronic Chuck, 0 to +300°C, P/N BC6107573P

- ADD TEXT?

SQ-109-278-00 — Thermal Chuck, 0 to +130°C for TP03010B Controller

- 6-inch thermal chuck, 0 to +130°C, nickel.
- Vacuum grooves.
- Temptronic P/N: CB0605E1S000N1

SQ-111-720-03 — Thermal Chuck Kit, Microwave, RF-1, Ambient to +300°C TPO315



- RF Chuck, nickel, vacuum holes (not grooves).
- Ambient to 300°C for TPO315 controller. Requires qualified Service person (Service Call) if installation done in the field.
- Chuck zone for 3-inch wafers.

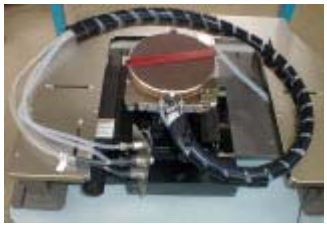
Thermal Chuck Mounts

SQ-114-455-02 — Thermal Chuck Adapter Kit, Temptronic, w/Aux Chucks

- Adapts the Temptronic 3000 series (up to 6-inch) chuck to the 9K/10K station.
- Adapter plate includes provision for 2 ea. Auxiliary Chucks.
- Supplied risers must be installed on existing Summit Positioners to compensate for added height from platen top to thermal chuck.
- 105-034 Manifold, Vacuum Summit included.
- Adapter plate, thermal chuck and auxiliary chucks must be assembled at the factory to set the heights of the chucks.
- Spacers are designed for the following chuck heights: .75-inch, .90-inch, 1.09-inch.
- Includes Installation Instructions.

***Note**: Chuck must be mounted before shipping.*

SQ-114-455-03 — Thermal Chuck Adapter Kit, Temptronic, w/Aux Chucks, SVA



- Adapts the SQ-132-675-(01 & 02), (Temptronic 3000 series --up to 6-inch) chuck to the 9K/10K station.
- Adapter plate includes provision for 2 ea. auxiliary chucks.
- Aux chucks are in the North and South positions on the East side of the adapter plate.
- Supplied risers must be installed on existing Summit Positioners to compensate for added height from platen top to thermal chuck.
- 105-034 manifold, Vacuum Summit is included.
- Adapter plate, thermal chuck and auxiliary chucks must be assembled at the factory to set the heights of the chucks.
- Large area Bridge Interference on west side with E/W positioner.

SQ-114-455-04 — 6-inch Thermal Chuck Adapter Kit, TCI, w/Aux Chucks, M150

- Mounts the 6-inch SQ chuck assembly to theM150 station (non-vacuum glide stage).
- The thermal chuck is ordered separately (contact Custom Products group for compatible chucks).
- Adapter plate with circular dovetail mount, 2 auxiliary chucks, and hardware to mount the thermal chuck to the correct height are included.
- This item is not to be sold without a thermal chuck on the order.
- Manufacturing to fully assemble and adjust thermal chuck to this assembly.

Thermal Controllers

SQ-135-272-01 — ERS Thermal System, 300mm, -60 to +300°C

- ERS -60 to +300°C thermal system for S300 HT stations (controller, chiller & accessories).
- H_2O cooled compressor.
- Compatible with SQ-S300-974-HT-01.

Thermojogger

SQ-116-033-01 (Temptronic SA126320) — Thermojogger, TP03200, SPO3210/TPO3220

- Thermojogger assembly for TPO-3200 series, including TPO3200/TPO3210/TPO3220 and TPO3215.

Devices, Testers, and Interfacing

Probe Card Holders (PCH)

SQ-115-418-03 — Probe Card Holder, U-Chamber, 11/12K, Custom

- 115-418 probe card holder for an 11/12K station.
- Custom designed for customer probe card application, including the daughter board attached to the probe card.
- Includes minimum length extender cable to connect the customer probe card and daughter card.
- Horizontal daughter card position e possible interference with the chuck.
- Includes a small support for the daughter board.
- CMI requires the use of the customer's probe card and daughter board during the design phase for this item. Design sign-off is required before manufacturing begins.

SQ-118-155-05 — Keithley Ring CarrierAdapter, Summit, HT-Attoguard

- Adapter for the Keithley Ring Carrier, similar to SQ-118-155-04.
- Compatible with standard Summit/S300 stations with the High Temp Attoguard. (circa August 2004)
- Ring Carrier must be removed when changing Probe cards.
- Ring Carrier is wired with coaxial cables and interfaces with Keithley Test System.

SQ-118-391-01 — Probe Card Holder, U-Chamber, S300, Theta Access

- 118-391 Probe Card Holder with door enabling access to the Theta adjust micrometer without removing the cover.

SQ-118-923-01 — Platen Retrofit Kit, Summit 11/12K

- Platen Assembly retrofit kit for Summit 11/12K probe stations built prior to April 1996.
- Enables compatibility of 114-338 and 115-418 Probe Card Holders.
- Includes upper and lower platen assemblies, probe card holder cover plate and mounting hardware.
- Platen to chuck planarization should be verified within specification after retrofit.
- Note: Manufacturing to assemble parts as complete as possible for easy field Installation. Will need new style triax panel to replace old single piece version if triax panel and PCH to be used simultaneously.

SQ-118-923-02 — Top Platen Retrofit Kit, Summit 11/12K

- Top platen retrofit kit for Summit 11/12K probe stations.
- Enables compatibility of 114-338 and 115-418 probe card holders.
- Station must have newer revision lower platen with notch in back.
- Includes upper platen assembly, probe card holder cover plate and mounting hardware.

SQ-120-187-01 — Replacement Clamp, Pair, One Piece, SS2544

- Replacement pair of single piece clamp for custom RAC-52.

SQ-122-282-01 — Probe Card Holder, S300, Ceramicard

- PCH interface to be used with IBM CERAMICARD on a S300 station.
- Design based on the SQ-111-420-06 (PCH for the CERAMICARD on the PS-21 station)
- Please provide s/n of S300 station so factory can determine if this custom part is applicable.

SQ-122-284-01 — Probe Card Holder, Summit, A580

- PC harness interface for use with Terradyne tester A580 on a 12K station.

SQ-123-849-01 — PCH Fixture Holder, for SQ-R48-14, Custom

- Interface fixture (two "wings") enables two different custom PCH fixtures to be used on a SQ-R48-14 station.
- Mounts permanently to station.
- Rough manual 4-point planarization capability using set-screws, and rough theta adjustment using mounting bolts through PCH fixture slots.

SQ-126-113-01 — Cover To Reduce Purge Leakage on SQ-126-125-01

- Cover for the large open areas on the north and south of the SQ-126-125-01 probe card holder.
- Reduces leakage during purges.

SQ-126-125-01 — Probe Card Holder, Custom, S300

- Custom probe card holder for IBM to mount their ESD Mother/ Daughter probe card combination.
- Holds the mother card on each side utilizing 1/4-inch of clear area on the edge of the board.
- +/- 3 degrees of theta and is planarizable.
- Requires SQ-S300-651-02, which has a custom Platen to mount this Holder.

SQ-126-125-02 — Probe Card Holder, Custom, S300

- Custom probe card holder for IBM used to mount two types of probe cards: one rectangular board with a radius end and one round board.
- +/- 3 degrees of theta and is planarizable.
- Requires SQ-S300-651-05 , which has a custom platen to mount this holder.
- Xompatible with SQ-114-442-02.
- Customer must sign off on design before manufacturing begins. Delay in sign off may delay final ship date.

SQ-126-125-03 — Probe Card Holder, Custom, S300

- Custom probe card holder for IBM used to mount two types of probe cards: one shaped like a keyhole and one round board.
- +/- 3 degrees of theta and is planarizable.
- Requires SQ-S300-651-05, which has a custom Platen to mount this holder.
- Compatible with SQ-114-442-02.

SQ-126-125-04 — Probe Card Holder, Custom, S300, w/ Cover

- The same as SQ-126-125-01 with the addition of SQ-126-113-01 cover.
- Custom Probe Card Holder for IBM used to mount their ESD Mother/Daughter probe card combination.
- Holds the mother card on each side utilizing clear area on the edge of the board.
- +/- 3 degrees of theta and is planarizable.
- Requires SQ-S300-651-02 , which has a custom Platen to mount this Holder.

SQ-126-131-02 — Upgrade Kit, Clamp, Support, SQ-RAC-52-04

- Upgrade kit for use with an existing SQ-RAC-52-04 probe card holder.
- Provides a support clamp for 4.5-inch wide probe cards that do not reduce in width at the connector end, and that front-exit an R48/ R61 station.
- Existing edge-card connector is not used.
- Support clamp:
  - Mounts to existing rail-ends
  - Provides support under the card
  - Is made of non-conductive material
  - Covers the top of the card to provide support and strain relief.
- Edge card connector "free-mounts" on the end of the exposed card edge.

SQ-133-601-04 — Probe Card Holder, Custom, S300, Without Frost Cover

- Custom probe card holder for 4.5-inches (W) x 190 mm long (L, max) with all other probe card criteria TBD.
- Card holder frame can be positioned (N,E,S,W) in 45° increments in the platen cutout hole.
- Compatible with SQ-S300-653LP-04 station or a station that has had SQ-117-100-0X (TBD) installed.
- Planarizable, with +/- 3 degrees of theta adjustment.

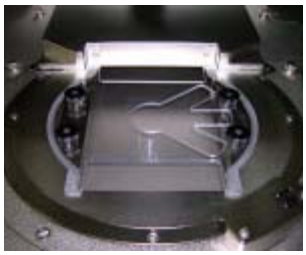
SQ-133-610-01 — Upgrade Kit, SQ-118-155-04 TO -05, Factory Only

- Upgrade kit to convert SQ-118-155-04 to SQ-118-155-05.
- This is a factory upgrade ONLY.
- Customer’s SQ-118-155-04 must be received at Cascade Microtech two weeks prior to ship date. Previous units, please contact the Specials group for options.

SQ-135-275-01 — Adapter Kit,9.25-inch RndCard to SQ-126-125-02

- Adapter kit enabling compatiblity between IBM's 9.25-inch probe card interface board and SQ-126-125-02 (ASSY, HOLDER, PROBE CARD, CUSTOM, S300).
- Facilitates two different daughter cards with different drafts: one from the sample provided by the customer at time of design (with cantilever needles) and one 0.27-inches deeper (Cobra).

SQ-135-289-01 — Frost Shield Cover for LPPCH



- Frost cover for the Low Profile PCH.
- Accommodates two different probe card styles: one standard 4.5 x 12 with an edge connector, and one 4.5 x 6 with header connections on both ends.
- Also supports the use of high impedance Pico Probe usage with the cover and cards in place.

SQ-RAC-52-04 — Probe Card Holder, for R48/55/61,48 Pin Holder

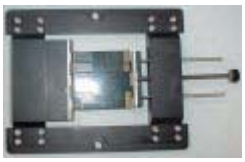
- Standard RAC-52 modified to support a 48-pin edge connector on a 11-inch probe card.

Device Holders (DUT Holders)

SQ-116-472-02 — Package Part Fixture Mount-SQ-R61-06, 270°

- Replaces the standard system chuck.
- Includes 2 ea auxillary chucks for mounting CMI CAL substrates.
- Fixture mount allows 270° manual rotation, with indents at 0 , 90, 180, and 270°.
- Package part fixtures (SQ-116-473-xx) can easily be mounted to or removed from this mounting system.
- Package part fixtures can accomodate packages up to 2.5” x 3.5" x 0.5" High (sold separately).
- Fixture index angle held firm with vacuum, vacuum must be released to rotate fixture.

SQ-129-027-04 — Device Holder, Small, Substrate, 0.5- to 2.0-inch



- Adjustable small substrate device holder for 0.5” x 0.5” up to 2”x 2” substrates.
- Accommodates substrate thickness of .0312-inch to 0.1-inch.
- Requires 0.020-inches clear space on perimeter of substrate.
- Holds the substrate by the opposing edges, enabling probing from 2 opposing sides.
- Notched members hold the sample to help reach probe points close to the edge of the sample. (Sample may have to be rotated to reach some points.)
- Tangs on two sides plus mounting holes.
- Compatible with, but not included:
  - Variable height board clamps (SQ-115-0331-01)
  - Stand-offs in station base (SQ-MTS-200-01)
  - Vertical board holder.

SQ-RAC-03-00 — Package Device Holder, 4.5-inch Card

- RAC-03 modified with vacuum hold down for R48/55/61.

SQ-RAC-03-11 RAC-03 — Adjustable Holder for Widths 2- to 6-inch

- Adjustable holder for card widths between 2- and 6-inches.
- Thumb screws enable adjustment without additional tools. Install with set screws by replacing the vacuum chuck with fixture.
- Compatible with RHM-06 and R32/41 Stations.

SQ-116-473-01 — Package Part Fixture A Module 1

- Custom package part holding fixture.
- Interfaces to SQ-116-472-0x.
- Packaged device sizes up to 2.5" x 3.5" x 1/2" height.
- Package modules being held with package fixture to have parallel surfaces top designs for different size module require separate part number. [?]

SQ-116-473-02 — Package Part Fixture B, Module 2

- Custom package part holding fixture.
- Interfaces to SQ-116-472-0x.
- Packaged device sizes up to 1.8" x 2.25"x 1/2" height.
- Package modules being held with package fixture to have parallel surfaces top designs for different size module require separate part number.

SQ-117-324-01 — Dovetail Mount With Planarization Kit, R61

- Dovetail mount allows easy removal from the R61 stage.
- The chuck on the R61 must be removed from the dovetail mount.
- Consists of dovetail mount attached to plate enabling custom (optical) chuck attachment.
- Mounting hole information will be provided.
- Design incorporates means to planarize.
- Compatible with SQ-R6142-02.

SQ-117-958-01 — Holding Fixture, Thermal Chuck, BGA

- Test fixture for 255-BGA package.
- Fixture and BGA package held by chuck vacuum.
- Device is placed upside down and held by spring loaded mechanism on fixture to aid in temp. transfer.
- Customer to send sample BGA package.

SQ-118-920-02 — Board Clamp, Variable Width, Dovetail, Aux Chucks

- Note: Do not re-quote this SQ. See the Custom Products Group for more information.
- Variable-width board-clamp with circular dovetail mounting (similar to the SQ-118-920-01)
- Additional two aux chucks.

SQ-118-920-03 — PCB Variable Width Clamp With Dovetail Mount

- PCB variable clamp with circular dovetail mounting.
- Designed for 2- to 8-inch boards and with 0.247-inch clearance for components underneath.
- Compatible with SQ-R48-17.

SQ-122-642-01 — Holder, ECA, RF-1

- Variable width board holder that attaches to the top of the RF-1 chuck.
- Consult the Specials Group BEFORE ORDERING THIS DEVICE for more information about it's specific application requirements and limitations.

SQ-129-027-01 — Device Holder, Small Substrate,1.5-to2.0-inch

- Adjustable small substrate device holder for 1.5" x 1.5" up to 2" x 2" substrates.
- Accommodates substrate thickness of .0312 to .0625.
- Holds the substrate sides to enable bottom-side probing from two opposing sides.
- Requires 0.125 dead space on perimeter of substrate.
- Tangs are present on two sides, held by variable height board clamps.
- Requires 2 SQ-115-(331 or 335)-01 board clamps (not included).

SQ-RAC-03-13 — Packge Device Holder, ADJ, Dovetail Mount

- Packaged device holder for card widths between 2- and 8-inches.
- Dovetail mount.
- Remove vacuum chuck and replace with fixture using set screw.
- Compatible with R48 / R61 Stations.
- Similar to SQ-RAC-03-09.

SQ-RAC-30-01 — Packaged Device Holder for REL-4800

- RAC-30 modified to fit R48 probe station.

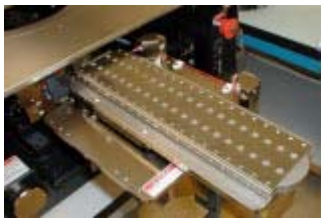
SQ-RAC-41-02 — Die Mount, 0.018 Holes, 5x, Separate Vacuum

- Modified RAC-41 with five holes instead of one.
- The four additional holes are added in 0.4-inch increments, two on each side of center hole radiating linearly.
- Separate vacuum source is required to hold device under test.
- Overall height of the fixture is .25-inches (may cause positioner incompatibility. Check range of positioners with current setup.)

SQ-RAC-41-03 — Die Mount, Custom Hole Size & Placements

- RAC-41 with center hole enlarged to 0.1cm.
- Four holes are added in 3mm increments, two on each side of center hole radiating linearly.

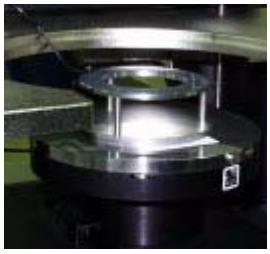
SQ-124-342-01 — Dut Carrier Holder for SQ-S12101-10



- Removable assembly designed to hold an AUER device carrier. (The design is based on AUER Precision Co. Drawing No. 120827, rev X0. Dated 10/19/01.)
- Orients the 3.1-inch x 12-inch carrier so that the 12-inch length is on the Y axis (north-south).
- Probing limited to approximately 8-inches of the carrier.
- Planarizable.
- The holder, while holding the carrier, does not control the flatness of the carrier, nor the orientation of the devices.(X,Y,Z,THETA).

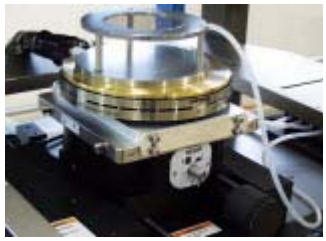
Optical Chucks

SQ-109-155-03 — 3-inch Backside Optical Chuck, Vacuum Mount, 4-inch Vacuum Zone



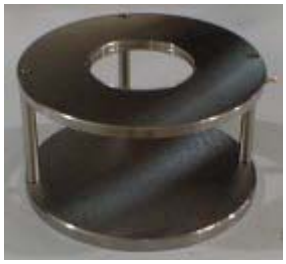
- Vacuum-on addition to an existing chuck enabling backside viewing of a 3-inch wafer.
- Mounting requires a 4-inch minimum vacuum zone.
- No quartz window in the chuck.
- Clearance between vacuum mount plate and top wafer holding plate is appx. 1.25-inches.

SQ-109-155-04 — 3-inch Backside Optical Chuck with Quartz Window



- Vacuum-on addition to an existing chuck enabling backside viewing of a 3-inch wafer.
- Mounting requires a 4-inch minimum vacuum zone.
- The quartz window is 2.83-inches diameter, with 'C'-shaped vacuum ring of 2.916 dia to hold 3-inch wafers.
- Clearance between vacuum mount plate and top wafer holding plate is appximately 1.25-inches.

SQ-109-155-07 — 2-inch Optical Backside Chuck with Quartz Window



- Vacuum-on addition to an existing chuck enabling backside viewing of a 2-inch wafer.
- Mounting plate design is a nominal 4.33-inches (compatible with 4-inch vacuum diameter on R61).
- The quartz window has 'C'-shaped vacuum ring to hold 2-inch wafers.
- The three top plate support posts are 90° from each other, leaving a 180° area free for probing (space between opposite posts is a nominal 3.75-inches)
- Clearance between top of vacuum mount plate and bottom of wafer holding plate is approximately 1.5-inches.

SQ-120-169-01 — 2-inch Optical Backside Chuck with Quartz Window, Theta

- Allows viewing of the backside of a 2-inch wafer.
- The chuck has 3 selectable vacuum zones and a tweezer groove.
  - Zone 1+2+3 holds 2-inch wafer
  - Zone 2+3 holds 1/2-inch wafer
  - Zone 3 holds 1/4-inch wafer.
- The Theta handle slides out 4-inches when all vacuum zones are released.
- Feature eases loading wafers. [what feature?]
- Circular dovetail mount for raised base SQ-R61-04.
- Clearance between vacuum mount plate and top wafer holding plate is appximately 3.75-inches.

SQ-120-169-02 — 3-inch Optical Backside Chuck with Quartz Window, Theta

- 3-inch back-side viewable optical chuck with quartz window and theta adjustment.
- Chuck has 3 selectable vacuum zones and a tweezer groove:
  - Zone 1+2+3 holds 3-inch wafer
  - Zone 2+3 holds 1/2-inch wafer
  - Zone 3 holds 1/4-inch wafer
- Circular dovetail mount for raised base R48/R61 stations.
- Clearance between vacuum mount plate and top wafer holding plate is appximately 3.75-inches.
- Quartz not glued into assembly, customer to mount.

SQ-120-414-01 — 2-inch Guarded Optical Chuck, Slide Load

- Optical chuck dovetail base for mounting to SQ-R61-04.
- Slide load mechanism provides 4-inch movement for loading devices.
- +/- 15° Theta, 30° total
- 3 zone vacuum enables holding 1/4-inch, 1/2-inch and full 2-inch wafer.

SQ-120-414-02 — 2-inch Optical Chuck, Guarded, Slide Load

- Optical Chuck with dovetail base for mounting to SQ-R61-17.
- Slide load mechanism provides 4-inch movement for loading devices.
- +/- 15 degree Theta 30° total and single zone vacuum groove.

SQ-108-347-04 — Probe Ring for HP-4062 Test Head, Tilt Access

- Center of probe ring enables tilting up to aid in replacing probe cards.
- Mounts in 108-846 platen cover for 11/12K.

Microscopes and Accessories

Microscopes

SQ-108-783-DO — A-zoom Microscope, 108-783 w/ Dual Objective

- Standard 108-783 microscope with AZU-0000-D Dual objective option.
- Includes receiver and AML-262 dual objective mount.

SQ-132-680-02 — Digital Video Scope Kit, Articulating Arm, S300

- Standalone low power digital video microscope (SQ-133-588-01).
- Mounts on custom articulating boom stand (included).
- Mounts at the 2 1/4-20 holes at the top of any one of the 4 frame posts on the S300.
- Designed for viewing probes beyond the reach of the main microscope.
- Digital microscope output is NTSC and includes a built-in illuminator.
- Does not include monitor.

SQ-133-588-01 — Video Microscope, Motorized Zoom,6-160x

- Light compact digital microscope with a 3-inch (76.0mm) working distance.
- Magnification range with 15-inch display = 6X-160X
- Magnification range with 17-inch display = 7X-180X.
- Includes:
  - Articulating arm with gas cylinder lift
  - High resolution color auto-focus camera with built-in LED ring light array
  - Motorized zoom system with footswitch control
  - Remote control keypad with soft touch controls
  - Freeze-frame capability
  - Soften Image and reverse image capability
  - Soft touch controls for lighting adjustment
  - Toggle switch for camera or computer pass-through view.
  - S-Video or VGA output. Includes S-Video and VGA cables.
  - Monitor is required for image viewing (not included).

SQ-VMS-888-TH-01 — Seiwa Microscope Kit, Manual Focus, w/tilt Head

- VMS-888 with tilt head option (added at Seiwa factory).
- The tilt head option is an eyepiece mechanism that tilts down for easier viewing.
- Includes standard VMS-888 accessories.

SQ-VMS-888P-TH-01 — Seiwa Microscope Kit,Program Focus,w/ Tilt Head

- VMS-888P with tilt head option (added at Seiwa factory)
- The tilt head option is an eyepiece mechanism that tilts down for easier viewing.
- Includes standard VMS-888P accessories.

SQ-VMS-70ZP-TH-01 — Mitu, Prg Focus, FS70Z-THS , 2X, 10X, 20X OBJ, 10X EYE

- VMS-70ZP with tilt head option.
- Includes all standard VMS-70ZP accessories.

SQ-EZM-53/S-01 — EzLaze Laser System, Green/UV-115V, Video Spot Marker

- Standard EZM-53/S with the video spot marker option.

Microscope Mounting Kits

SQ-122-441-02 — Mounting Kit, Nikon, Summit, HS Bridge

- Mounting kit for the low power Nikon Microscope (equivalent to model SMZ800).
- Compatible with the high stability bridge on the Summit 11K.

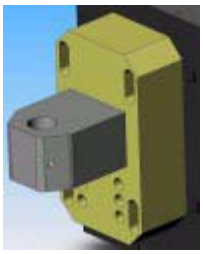
SQ-122-441-03 — Nikon Mounting Kit, R61.

- This is a mounting kit for the low power Nikon Microscope (equivalent to model SMZ800)
- Kit is compatible with SQ-R61-11 ONLY.

SQ-122-441-04 — Nikon Mounting Kit, R61

- Mounting kit for the low power Nikon microscope (equivalent to model SMZ800).
- Compatible with R48/61.

SQ-122-441-05 — Nikon Mounting Kit, Photonic,custom



- Mounting kit for the low power Nikon Microscope (equivalent to model SMZ800).
- Designed for use with SQ-120-703-04.

SQ-123-197-01 — FS70 Scope Mounting Kit, R1000

- Kit for mounting the Mitutoyo FS70 Mitutoyo FS70 Microscope to the Scope transport on R1000 stations.
- Use of this interface must be reviewed by the specials group prior to ordering. In most cases, order scope mount kit #122-249***

SQ-127-168-01 — FS70 Mounting Kit, Photonic

- Kit for mounting the Mitutoyo FS70 microscope (or equivalent) to a 1" X 1" manual transport on the Light Wave station.
- Compatible with SQ-120-703-06 when DUT Surface is 30mm below bottom side of platen.

SQ-133-613-01 — Low Power Scope Mount, LWPS Station

- Kit for mounting the Leica low power microscope on a LightWave Probe Station.
- Compatible with SQ-LWPS-09.

SQ-131-784-01 — Leica MZ12 Microscope Mounting Kit, RF1

- Mounting kit similar to 131-784, for mounting the low power Leica Microscope MZ12.5.

Microscope Acessories

SQ-116-474-01 — Class 1 Detune Option, EZM-53 & Objective Lens

- Class 1 detune of the optics system
- Compatible with Mitutoyo VMS60 & 70 Series microscopes only! Not compatible with Seiwa.
- Requires access to the customer's EZM EzLaze or EzLazeII laser and VMS60 or VMS70 microscope with objective to detune to a CLASS 1 operation level.
- Available in USA ONLY.

SQ-135-290-01 — Seiwa Eyepiece, 20x, One

- One Seiwa 20x eyepiece.
- Two each of this part number must be ordered for a pair.

SQ-131-535-01 — Optem Objective, 2x Conversion, 89MM WD

- 2X conversion objective with a working distance of 89 mm.

SQ-109-064-01 — Mitutoyo Eyepiece,20x, P/N 378-858

- ???

SQ-116-610-02 — Mitutoyo Reticle, 516577, Grad Line w/ Crossing Lines

- MITUTOYO reticle, graduation line with crossing lines (0.1/20mm).

SQ-116-610-03 — Mitutoyo Reticle, 516849,Grad Line

- MITUTOYO reticule, graduation line (0.1/10mm).

SQ-118-154-01 — Nikon Kit, Camera Mount, Olympus Microscope

- Fits phototube on Olympus scopes (BX, AX, MX series with U-SPT phototube, Vanox, BH2, IMT-2, SZH, SZ).
- Includes Olympus NFK 2.5x photoeyepiece and Nikon T2-Mount Adapter.
- Focusing through the microscope eyepieces is possible if the Olympus photomask eyepiece is used.

SQ-120-721-01 — Mitutoyo Objective, 20x, UV

- 20X M Plan UV series objective with 15mm working distance. Mitutoyo p/n 378-837-5

SQ-135-283-01 — Seiwa Eyepieces,10x, 1/100th Scale Reticle

- Pair of Seiwa SWF10XD eyepieces, with one eyepiece having a micrometer disc 1/100th optical scale.

SQ-108-294-01 — Mitutoyo Objective Lens,1x

- This is a 1X objective for Mitutoyo microscope.

SQ-108-571-01 — Mitutoyo Objective Lens, 20x,NIR

- Mitutoyo objective lens NIR, 20X, 20mm WD, .40NA

SQ-117-323 — Cover, Adapter For Microzoom Objective On PCH

- Cover adapter for Microzoom objective on a Summit Probe Card Holder.

SQ-118-413-01 — A-Zoom Upgrade, Laser Ready Option

- Laser ready upgrade option for eyepiece A-Zoom microscopes.
- AZM-EL upgrade includes AFE-53 Eyesafe Filter, dual lamp, A-Zoom cover and retrofit Fee.
- Scope must be returned to Optem for upgrade.

SQ-120-409-01 — Optem Digital Control, ECM-25F w/ SFW

- Digital control unit for Optem LAMPLINK illuminator.
- Includes RS-232 Port and console software focus and single lamp digital control.

SQ-123-668-01 — DIC,F/M/G Plan APO 20x

- Differential interference contrast slider (20X)

SQ-123-847-01 — Mitutoyo Lens Objective, 20x, 7mm, NUV

- 20X M Plan NUV series objective for near-UV bright-field observation with corrected wavelength from 335nm to 620nm, 17mm working distance.

SQ-132-022-01 — Seiwa Microscope Add-On, Motorized Turret

- Motorized turret (Seiwa item ARC-01) for Seiwa's model 888 microscope.
- Seiwa factory add-on.
- Must be ordered at the same time as microscope. Orders that do not include a Seiwa microscope will not be accepted.
- Automated switching of the objectives via the motorized turret is not top hat compatible.

Positioners and Probe Holders

RF and DC Positioners Mixed

SQ-111-584-01 — MH6 Vacuum Positioner, Left, 200 TPI, X/Y/Z Motion

- Left hand MH2 vacuum positioner with 200 TPI X,Y and Z motion.
- All other functionality is the same as standard MH2.

SQ-112-970-01 — 8510XF Positioner, West, Offset Z Knob, Summit 9K/10K

- Standard West XF positioner with probe Z knob offset to side for straight cable exit.
- Not compatible with large area bridge. Contact Custom Products Group for more information.

SQ-114-845-MIC — North/South RF Positioner, Custom Micrometer, Summit 11/12K

- Summit 11/12K RF North or South positioner with custom X/Y/Z Mitutoyo Micrometers.

SQ-FPD-100-01 — FPD-100 Positoner, Magnetic Base

- FPD-100 positioner with a magnetic base with base lifting lever to break the magnetic hold.

SQ-MDL/LS-01 — MDL Positioner, Left, Non-magnetic, Vacuum Base

- Left hand MDL positioner made with non-magnetic materials.
- Z-movement using the gross z-adjustment screw will not be as smooth due to the nonmagnetic material used for the pivot bearing.
- Includes vacuum base.
- A non-nickel plated MPC-01 probe mount and PHJ Jack Lock are included.
- Probe tips are not included.

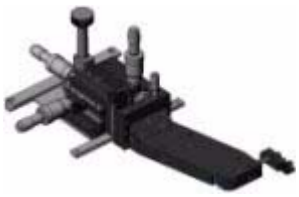
SQ-MDL/RS-01 — MDL Positioner, Right, Non-magnetic, Vacuum Base

- Right hand MDL positioner made with non magnetic material.
- Z-movement using the gross z-adjustment screw will not be as smooth due to the nonmagnetic material used for the pivot bearing.
- Includes vacuum base.
- A non-nickel plated MPC-01 probe mount and PHJ jack lock are included.
- Probe tips are not included.

SQ-101-268-02 — North/South RF Positioner, Summit 9K, 2-inch Riser

- Summit North/South RF positioner with custom riser block.
- Provides 2-inches additional probe height.
- Customer installed standard block included.

SQ-101-268-MIC — North/South RF Positioner, Custom Micrometer, Summit 9100



- Summit 9100 RF North or South positioner with custom X/Y/Z Mitutoyo Micrometers.

SQ-101-543-02 — East/West RF Positioner, 2-inch Riser Summit 9K

- Summit East/West RF positioner with custom riser block.
- Provides 2-inches additional probe height.
- Customer installed standard block included.

SQ-101-543-MIC-UPG — Upgrade RF Positioner With Custom Micrometer

- Upgrades the customers 101-543 RF East/ West positioner with custom Mitutoyo micrometers for X-Y-Z.
- The completed unit will be the same as SQ-101-543-MIC.
- Upgrade is performed at the factory due to special fixturing.

SQ-113-120-03 — Motorized 8510XF RF Positioner, West Port, Summit 12K

- Motorized 8510XF RF positioner for Summit 12K west port.
- ECX box required to drive positioner motors.

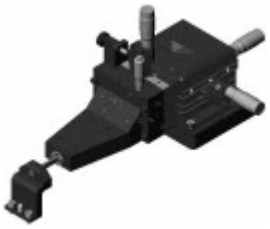
SQ-113-120-15 — Large Area Motorized mmW Positioner, West, Summit 12K

- Large area positioner with motorized X, Y, Z movement and manual probe planarization.
- For use on 11/12K and S300 stations.
- X and Y movement equals best effort 4-inches x 4-inches (+/- 2 inches about the center of the chuck with the chuck positioned at 0,0).
- Z-travel equals 0.25 inches.
- Compatible with Nucleus SW, ECX control box is required.
- Z-mechanism enables the probe arm and tuner mounting plate to move together.
- Mounting plate is designed for Agilent PNA-SW test heads and is also compatible with OML-VNA2-T/R form factors.
- When used with MicroChamber compatible waveguide probes, SQ-117-620-02 (Small Top Hat) is required.
- To achieve full possible travel range, Micro Chamber Top Hat assembly will need to be removed.

SQ-113-130-15 — Large Area Motorized mmW Positioner, Summit 12K

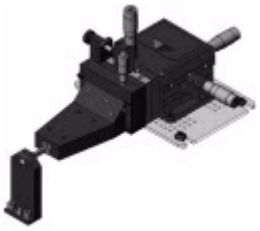
- Large area positioner with motorized X, Y, Z movement and manual probe planarization.
- For use on 11/12K and S300 stations.
- The X and Y movement equals best effort 4-inches x 4-inches (+/- 2 inches about the center of the chuck with the chuck positioned at 0,0).
- Z-travel equals 0.25 inches.
- Compatible with Nucleus SW, ECX control box is required.
- Z-mechanism enables the probe arm and tuner mounting plate to move together.
- Mounting plate is designed for Agilent PNA-SW test heads and is also compatible with OML-VNA2-T/R form factors.
- When used with Micro Chamber compatible waveguide probes, SQ-117-620-02 (Small Top Hat) is required.
- To achieve full possible travel range Micro Chamber Top Hat assembly will need to be removed.

SQ-114-746-05 — East/West RF Positioner, Magnetic Base, Summit11/12K



- East/West Summit 11/12K RF positioner with magnetic base and custom extended probe mount.
- Maintains standard Summit 11/12K probing height.
- Extended probe mount compensates for the height of the magnetic base.

SQ-114-746-07 — East/West RF Positioner, Photonic Mount



- 114-746B positioner for use in East or West position on a Light Wave station.
- Modified base mounts on a breadboard pattern (1/4-20 holes at 1-inch spacing).
- The probe mount nose piece has been dropped down to be compatible with stations that have the DUT surface 30mm below the bottom of the platen.

SQ-114-845-06 — North/South RF Positioner, 90°, Custom Mount-East, Summit

- Modified SQ-114-845-03
- Short round shaft from 9k design replaces standard probe mount shaft.
- Spacer block added to enable positioner to reach 1.25-inch left of station 0,0 at center of travel.
- Positioner is bolted to the platen cover in a fixed position.
- Probe separation is determined by bolt down location.

SQ-114-845-07 — RF Positioner, North/South, 90°, Custom Mount-West, Summit

- Modified SQ-114-845-04.
- Short round shaft from 9k design replaces standard probe mount shaft.
- Will bolt down to modified R61 platen.
- Probe separation determined by bolt down location.
- Mirror design of 114-845 with positioner from 114-746.

SQ-114-845-08 — RF Positioner, ATN, 90°, East, S300

- RF positioner modified to mount an SQ-114-388-02 shelf to support an ATN tuner on an SQ-S300-861-03 (or similar station).
- Used as an East positioner, as station has a modified platen cover to support it.
- Bolted to the platen cover in a fixed position.
- Probe separation is determined by bolt down location.

SQ-114-845-09 — RF Positioner, ATN, 90°, West, S300

- RF positioner modified to mount an SQ-114-388-02 shelf to support an ATN tuner on an SQ-S300-861-03 (or similar station).
- Used as a West positioner, as station has a modified platen cover to support it.
- Bolted to the platen cover in a fixed position.
- Probe separation is determined by bolt down location.

SQ-114-845-10 — North/South RF Positioner, 90°, Photonic Mount, 25mm

- Mirror image of the 114-845 positioner, used in a northwest position in conjunction with XF8510 positioner.
- Modified base mounts on the Photonics station with a 25 mm square pattern (SQ-120-703-01 or similar).
- Lowered nose piece enables compatibility with the device holder on the SQ-120-703-01.

SQ-114-845-11-MIR — Positioner,RF,North/South, 90°, Mirror Image, LWPS

- 114-845 positioner that is a mirror image of SQ-114-845-11, used in a north/north or south/south position on a Light Wave station (in conjunction with SQ-114-845-11).
- Modified base mounts on a breadboard pattern (1/4-20 holes at 1-inch spacing).
- Lowered nose piece enables compatibility with stations that have the DUT surface 30mm below the bottom of the platen.
- When used in the north position on a station with high power microscope turret objective mounts, only one objective at a time can be mounted in the turret.

SQ-114-845-12 — North/South RF Positioner, 90°, S300 and S11/12K

- 114-845B north/south positioner with modified hold down rails to enable compatibility with MS1-8W positioner.
- Required only for the south positioner location.
- North positioner can use standard product.(114-845B)

SQ-118-922-02 — Bolt-Down Kit, North, MPH,11K/12K

- Includes a mounting plate and bolt-down hardware for configuring SQ-MPH positioners in north location on Summit 11/12K platen.
- Designed to be compatible with XF positioners.
- Replaces magnetic base on SQ-MPHM-4BL-TH-03 positioner.
- Can be field installed.
- Not compatible with S300.

SQ-DCM-208-01 — Bolt Down Positioner, Needle Probe

- DCM positioner set up for the right side, without the vacuum or magnetic base.
- Bolts to a modified platen.

SQ-MPHM4BR-EX-01 — Probe Holder

- Magnetic 4-inch body, 6-inch shaft, below right

SQ-MPHM-6AL-01 — Probe Holder

- Magnetic 6-inch body, 6-inch shaft, above left
- Mirror image of SQ-MPHM-6AR-03.
- Standard MPHM-6AL positioner modified with a right-angle bracket.
- With the positioner facing north, the 90 degree right angle bracket will enable the positioner arm to point west.
- Not compatible with TopHat.

SQ-MPHV-4BL-TH-02 — Probe Holder, Vacuum, 4", Below Left, Alessi

- Compatible with the Alessi R4871, R6171 chambered system.
- Shaft extends past the end of the holder and has a thinned area to be compatible with TopHats.
- Not compatible with R55E.
- Not compatible w/bellows TopHat seal.
- Refer to Probe Selection Guide for probe compatibility.

SQ-MPHV-4BR-TH-02 — Probe Holder, Vacuum, 4-inch Below Right, Alessi

- Compatible with the Alessi R4871, R6171 chambered system.
- Shaft extends past the end of the holder and has a thinned area to be compatible with Top Hat.
- Not compatible with R55E.
- Not compatible w/bellows top hat seal.
- Refer to Probe Head selection guide for probe compatability.

SQ-MS1-8E-03 — East Only Programmable Positioner, Magnetic Base, 9K

- MS1 positioner that uses the Summit 9K style probe mount arm and a magnetic base.

SQ-MS1-8E-9K — East Only Programmable Positioner, S9K, S10K

- Positioners use Summit 9K/10K style probe mount arms.
- Positioner slider has user configurable dowel pin positions to allow offsetting in the south direction to avoid contact with Large Area Bridge Knob when positioner in north limits direction.

SQ-MS1-8N-01 — Programmable Positioner, North Only, Straight Arm, 12K

- Left-hand MS1 positioner with a fixed position mount for a 12K platen.
- Designed for use as the North positioner on SQ-S12741B-01.
- Positioner is oriented on the platen directly north of the platen opening with the arm mounting plate facing south.
- Arm is straight and modified to work directly under the scope mount.
- Requires ECX box.

SQ-MS1-8S-02 — Programmable Positioner, South Only, 90° Arm, 12K

- Left hand MS1 positioner with a fixed position mount for a 12K platen.
- Designed to be used as the south positioner on SQ-S12101B-01.
- Positioner is oriented on the platen the same as the East positioner with the arm mounting plate facing west.
- Arm is 90 degrees (for south position) and offset for proper alignment with the chuck.
- Also compatible with SQ-S12651B-02, SQ-S12201B-6-01, or SQ-S300-651-04 as a north and south positioner.
- Requires ECX box.

SQ-MS1-8W-03 — Programmable Positioner, West, Magnetic Base, S11/12K

- Magnetic base version of a MS1-8W.

SQ-MS1-8W-9K — Programmable Positioner, West Only, S9K, S10K

- These special positioners use Summit 9K/10K. [Summit 9/10K what?]

DC Positioners

DC Accessories, Probe Mounts and Holders

SQ-114-818-05 — Adapter Assembly, DCM, DCP, Triax, Reach Lengthened

- 114-818 lengthened for compatibility with the 12-sided top hat for 11/12K stations. (SQ-105-650-03)

SQ-132-663-01 — Probe Mount Adapter, Pico Probe Model 35, RF Probe Holder

- Adapter for holding a Pico Probe model 35 probe, able to mount to a probe holder on a MPH or RF positioner.

SQ-117-952-01 — Probe Holder Assembly, DCP/MMP, Ceramic

- Insulating probe holder made of ceramic material.
- Includes mounting hardware.
- Replaces 113-584 Extended Probe Holder in 114-842, 114-843, 114-847 Needle Probe Mounts (ref. Dwg 113-588).
- Included in SQ-114-842-02 Needle Probe Mount.

SQ-118-706-01 — Adapter, SQ Pico Probe to DCM/MH/MS, TopHat

- Adapts SQ-116-464-01 TopHat compatible 12C Pico Probe to DCM/MH/MS positioners.
- For use on Summit and Alessi probe stations.

SQ-115-283-01 — Arm Extension Assembly, PE5/MDL

- Enables mounting of PE5-02(PE5-11), PE5-32 to MD1 or MDL positioners.
- The positioner IS NOT included, only the ARM Assembly used for mounting.

SP-WPH-903-400-01 — Probe Head, Multineedle, Ceramic Blades

- WPH-900 series probe with 3 ceramic blades (similar to DCQ blades) replacing standard metallic needles.
- Pitch is 400um.

SQ-MMP-01/J-01 — Probe Mount, 1" Shorter, Straight MH/MS With PHJ/M

- Standard probe mount & jack lock probe holder.
- The arm is 1-inch shorter (by reducing MMP-01-50 length).

SP-DCP-247K-25 — Coax Probe Assembly, Kelvin, 25µ Pitch, 5.0µ BeCu Tip

- DC coaxial probe with shipping box
- Kelvin
- 25 micron pitch
- 5 micron radius BeCu tip
- Nominal 11.7 mil diameter BeCu center conductor / tip
- Coax OD of the coax is 0.047-inch
- Number etched on the side of the probe is DCP-247-25
- Package label reads SP-DCP-247K-25.

SQ-108-289-03 — Probe Assembly, PE5/32, 5cm, Articulated Arm, Button Head Screws

- Probe assembly with a 5cm long probe tip holder on an articulated arm.
- Probe tip is the same as a PE5/32 with a shorter holder.
- Articulated arm is mounted to a pivot block and all links are held by button head screws.
- Cable assembly is 2M long.

SQ-108-289-04 — Probe Assembly, PE5/32, 5cm, Articulated Arm, BNC Connector Shield

- Probe assembly with a 5cm long probe tip holder on an articulated arm.
- Probe tip is the same as a PE5/32 with a shorter holder.
- Articulated arm is mounted to a pivot block and uses thumb screw for adjustments.
- Cable assembly is 32 inches long.
- Connector type is a coaxial BNC wired to the triax cable with the guard and shield conductors shorted together and connected to the BNC connector shield.

SQ-108-310-02 — Adapter, DCP to R41/32 ON MH2 USING A 105-540

- DCP probe mount for use with a R41 or R32 on a MH2 style positioner.
- For use only with the 105-540 coax cable (BNC to SSMC).

SQ-114-818-09 — Dual Triax Adapter Kit, DCM Positioner, EG2001

- Modified 114-818 style dual triax adapter kit for use in conjunction with a DCM positioner (not included) on an EG2001 prober.
- Adapter has been designed with a 12.5 cm reach and a drop down for a 35mm chuck to platen separation.

SQ-114-847-01 — Needle Probe Mount, Jack Lock MDL, S11/12K

- MD series positioner needle probe mount for Summit 11/12K probers.
- Use standard PTT probe tips (PTT-XX/4-25).
- MD series positioner are added as separate item, magnetic base recommended.

SQ-118-408-01 — Adapter, Probe Arm, Custom Drop Down, MMP

- Enables the use of MMP-01 and MMP-12 probe mounts on EG and R&K probers.
- Includes mounting hardware.
- MH2 positioner and probe mount are ordered separately.

SQ-135-273-01 — DCP Adapter, MD Positioner, RF1, Using 105-540

- DCP probe mount setup for use with a MD style positioner on an RF1 station.
- For use only with the 105-540 coax cable (BNC to SSMC).
- Recommended for use on magnetic based positioners ONLY.

SQ-104-030K-03 — Triax Adapter, Kelvin, DCM, R6151-G-Chamber

- DCP probe holder with dual triax adapter for Alessi R48/61 probe stations including microchamber systems.
- Compatible with with DCM, MS-1, MH5, and magnetic base MH2 positioners.
- Includes lengthened coaxial cable on triax adapter, extended probe mount, and set of spacers to allow probing in SE and SW ports with mounting hardware.
- Triax cables or DCP probes are not included.
- Not compatible with MH2 series vacuum base positioner due to assembly weight .

SQ-108-289-01 — Probe Assembly, PE5/32,5cm HOLDER,MANIP ARM

- Probe assembly with a 5 cm long probe tip holder on an articulated arm.
- Probe tip is the same as a PE5/32 with a shorter holder.
- Articulated arm is mounted to a pivot block and all links are held by thumb screws.
- Cable is 2m long.

SQ-113-442-03 — Arm, Gravity, Loaded, Mount to MDL Positioner, 12K

- Adjustable maximum down stop and adjustable tension screw.
- Designed to hold 1.25-inch long PTT.
- .020 dia tips for compatibility with VMS-60 10X.
- Replacement needles SQ-116-165-01 with 2.4 um radius tips.
- Cable SQ-116-032-01 recommended.
- Magnetic base MDL positioners must be used with gravity probe.

SQ-114-442-01 — Articulated Arm, DCM, MH2, Use With Probe Card Holder

- Articulated arm and mounting bracket enables use with MH2 or DCM type positioner.
- Extended end supports MMP-12 mount.
- Enables positioning over Summit 11/12K probe card holder without the cover on.
- Enables probing can through the center of probe card.

SQ-118-701-01 — Pico Probe Mount, R48/61, Model 18-B,19,28,29

- Required when mounting GGB Pico Probe models (18-b, 19, 28, and 29) on MMP-12/5 Pico Probe mount.
- Becasue the pico probe tip has two contacts (one for power), it cannot be reversed 180 degrees for chuck below platen configurations (R48/61).
- Replaces a mount on the MMP-12/5 that provides proper probe orientation and be easily installed in field.

SQ-118-705-01 — Shaft, Gravity-DCP

- Shaft design to allow adapting DCP to SQ-113-442 gravity probe.

SQ-126-127-01 — Adapter, Probe Arm, Drop Down, R48/R55/R61, Flat

- Flattened version of the standard drop-down probe arm member used on MMP-12/5, MMP-51's, and PE5-xx/5 variations, for R48 / R55/ R61 stations.
- Probe arm has standard drop-down, but does not extend out as far.

SQ-133-611-01 — Probe Mount, MH/MS, Custom Drop Down, With PHJ/M

- MMP-51/J probe mount with the standard drop-down removed and replaced with a custom flat drop-down (SQ-126-127-01).

SQ-PHJ-12-01 — Probe Holder, .08 Diameter x 12", Brass Rod

- 12 inch long PHJ (non-plated) straight probe holder.

SQ-PE5-02/5-04 — Coaxial Probes

SQ-PE5-02/5-02 Coaxial probe, 6 ft cable, 50 ohm	• For R48/R61 stations. • Standard PE5-02/5 coax probe with six foot cable. • Based on PE5-02/5
SQ-PE5-02-05 Coaxial probe, 50 ohm	• Coax probe PE5-02 without cable and mounting hardware. • Nylon mount part only. • Based on SQ-PE5-02-03 with s-bend
SQ-PE5-02/5-04 Probe assembly, 1.5 m cable	• For R48/R55/R61 stations. • Based on PE5-02/5, with 1.5 meter cable

SQ-PE5-11 — Coaxial Probes

SQ-PE5-11-01 Coaxial probe with 2 m cable	• PE5-11 with 2 meter (78.7") cable. • Does not come with mounting hardware not included.
SQ-PE5-11-02 Coaxial probe	• Coax probe portion of a PE5-02 without the cable and any mounting hardware.

SQ-PE5-06 — Triaxial Probe

SQ-PE5-32-06 Triaxial probe, R1000	• PE5-32 triax probe with drop down and short reach • For use with SQ-R1000-19C. • Enables probing small geometries using MH2 postioners. • SQ-R1000-19C design requires 8 probes.

SQ-PE5-32/5 — Triaxial Probes

SQ-PE5-32/5-02 PE5-32/5 probe with 1 m cable	• Includes 1 m cable.
SQ-PE5-32/5-04 Triaxial probe with 1.5 m cable 50 ohm	• Includes 1.5 m cable.
SQ-PE5-32/5-10 Triaxial probe with 2 m cable	• Based on PE5-32-50 • 2 m (78.75-inch) cable. • Mounting hardware not included.
SQ-PE5-32/5-13 Triax probe with 24-inch cable	• Based on PE5-32-50 • 24-inch cable. • Mounting hardware not included.
SQ-PE5-32/5-14 Triax probe with stubby cable	• Based on a PE5-32/5. • 2-inch nominal triax cable. • Without "flying wire to alligator clip".
SQ-PE5-32/5-89 Triax probe with 4 m cable, 50 ohm, 89 mm holder	• PE5-32/5 with 4 m (157.5-inch) cable. • 89 mm (3.5-inch) holder.
SQ-PE5-32/DCM-03 Probe with 28-inch cable	• PE5-32 probe intended to be used with a DCM positioner on a Summit station. • Based on PE5-32 • Special mounting block enables mounting on a DCM positioner. • 28-inch triax cable (from probe pin jack to triax connector, actual exposed cable is nominal 4-inches shorter).

SQ-PE5-32/DCM Probe

SQ-PE5-32/DCM-01 Probe for DCM positioner with 24-inch cable	• PE5-32 probe for use with a DCM positioner on a Summit station. • Based on PE5-32. • Special mounting block enables mounting on a DCM positioner. • 2-foot triax cable (cable measurement is from probe pin jack to triax connector, actual exposed cable is nominal 4-inches shorter).

GGB Tips

SQ-109-167-01 — PROBE TIP,PICO,28-5-10

- GGB Industries #28-5-10 probe tip

SQ-114-503-01 — PROBE TIP,REPLACEMENT, PICO PROBE 12C, 12C-1-10

- Wire size: 10 micron
- Tip size: <0.1 micron
- Minimum quantity buy: 6 ea.

SQ-114-503-02 — PROBE TIP,REPLACEMENT, PICO PROBE 12C, 12C-2-10

- Wire size: 10 micron
- Tip size: <0.1 micron
- Minimum quantity buy: 6 ea.

SQ-114-503-03 — PR Wire Size 35 micron, tip size <2.0 micron.

- Minimum quantity buy: 6 ea.

SQ-116-465-01 — PROBE TIP,REPLACEMENT, PICO PROBE 12C-1-10-HT

- High temp version
- Wire size: 10 micron
- Tip size: <0.1 micron
- Minimum quantity buy: 6 ea.

SQ-129-659-02 — PROBE TIP,REPLACEMENT, MODEL 12C,CUSTOM

- Custom version "12C-1-22 style" replacement tip for Pico Probe Model 12C.
- Enables increased usable voltage range of -20V to +40V.
- Usable on standard Model 12C's and SQ-116-464-01 probe.
- Input Resistance increases to approximate range of 1.8 to 2.0 m Ohms.
- Overall attenuation increases to 20:1 with a high impedance oscilloscope input, and increases to 40:1 with a 50 Ohm scope input.
- All other specifications remain the same as standard tip.
- Minimum quantity buy: 6 ea.

SQ-135-279-01 — TIP,PICO,18C-4-20

- Pico probe tip, with 20 micron shaft diameter and <1.0 micron point diameter, for a Model 18C probe.
- Vendor part number 18C-4-20.

RF Positioners

SQ-114-746-MIC — East/West RF Positioner, Custom Micrometer, Summit 11/12K

- Summit 11/12K RF East or West positioner with custom X/Y/Z Mitutoyo micrometers. (Mitutoyo code number 110-502)

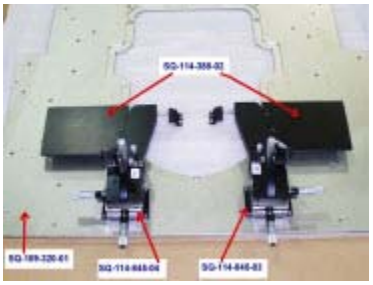
SQ-101-543-MIC — East or West RF Positioner, Custom Micrometer, Summit 9100

- Summit 9100 RF East or West positioner with custom X/Y/Z Mitutoyo micrometers. (Mitutoyo code number 110-502.)

SQ-114-746-02 — East/West RF Positioner, Extended Shaft, Summit 11/12K

- 9-5-00 with ACP40
- Min separation: 0.425-inch, Max separation: 0.347-inch
- Shaft extended an additional 2 cm (0.787-inch).
- Intended for use with 12 sided TopHat assembly.
- Extra length enables RF probe calibration.
- NOTE: Shaft is not thinned to increase stiffness, as it would cause light and air leakage around the TopHat seal.

SQ-114-845-02 — North/South RF Positioner, Extended Shaft, Summit 11/12K

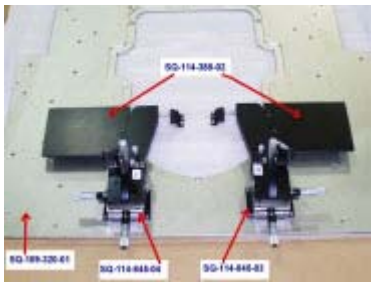


- 9-5-00 with ACP40
- Min separation: 0.425-inch, Max separation: 0.347-inch
- Shaft extended an additional 2 cm (0.787-inch).
- Intended for use with 12 sided TopHat assembly.
- Extra length enables RF probe calibration.
- NOTE: Shaft is not thinned to increase stiffness, as it would cause light and air leakage around the TopHat seal.

SQ-114-845-03 — North/South RF Positioner, 90°, Custom Mount, East, Summit 11/12K

- Modified to mount SQ-114-388-02 shelf to support ATN tuners.
- Required for non B stations when used on 11K/12K station as West positioner.

SQ-109-320-01 — Platen Cover and for B stations SQ-119-235-01 Upper Plate



- The positioner is bolted to the platen cover in a fixed position.
- Probe separation determined by bolt down location.

SQ-114-845-04 — North/South RF Positioner, 90°, Custom Mount, West, Summit 11/12K

- Positioner modified to mount SQ-114-388-02 shelf to support ATN tuners.
- Required for non B stations when used on 11K/12K station as West positioner.

SQ-109-320-01 — Platen Cover and for B stations

- ???

SQ-119-235-01 — Upper Platen

- Positioner is bolted to the platen cover in a fixed position.
- Probe separation is determined by bolt down location.
- Design mirrors 114-845, with positioner from 114-746.

RF Positioner Accessories

SQ-129-069-01 — Drop-Down Assembly, E/N, LWS, MS1-8E / North

- Drop down, probe mount and hardware provides a north attack on an East MS1-8 motorized positioner.
- For use on a standard LWS.

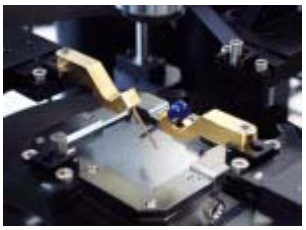
SQ-129-070-01 — Drop-Down Assembly, W/S, LWS, MS1-8W / South

- Drop down, probe mount and hardware provides a south attack on an West MS1-8 motorized positioner.
- For use on a standard LWS.

SQ-135-297-01 — Tip, Pico,18C-4-20

- Pair of custom extended probe mounts compatible with SQ-135-281-01 (Adapter plate,18" hole to 6", SQ-S300-651-07) when using East or West RF standard positioners (114-746B or 115-597B).
- 2 probe mounts
- Adapter plate and positioners not included.

SQ-104-913-01 — Adapter, WPH Mount to FP Assembly, Fixed Position



- Mount has milled area to restrict position of FP probe to point straight out.

SQ-111-593-01 — Drop-Down Arm, MPH, R48

- Custom probe mount drop down arm for MPH probes on R48 station.
- Replaces PN 100-771 in the standard MPH assembly.

SQ-105-111-01 — Magnetic Base, MPH Left, DCM Left

- Special magnetic base with additional holding force.
- Compatible with MPH and DCM magnetic Left positioners.

SQ-114-306-01 — Kit, 1" Rise Summit 910x Positioner, User Install

- Enables replacement of positioner standard bottom slider with a thicker slider, and 2 ea. .4-inch spacers (102-264 included in kit)
- Results in total probe rise of 1-inch.
- Enables use with package device holder SQ-RAC-03-xx (Install 101-498 dowel pins into 103-796 slider' prior to shipment).
- For East/West positioners only. Consult Custom Products Group if North or South spacers are needed.

SQ-115-033-01 — Adapter, MMM-04 to MPHM 4 Arm

- Enables use of MMM-04 ARM with MPH (A) series probe holder.
- Maintains same vertical positional adjustment range as standard MPH arm.
- Distance from MPH front edge to center of probe tip equals approximately 11.23 cm.

SQ-120-174-01 — Bias-Tee Bracket Mount, MS1-8

- HP 11612B option k11 (left) or HP 11612B option k21 (right).
- Designed to mount between MS1-8W or MS1-8E probe mount arm and support.
- Mounts the HP (Agilent) bias tee in a vertical position.
- Once bracket is installed on positioner, the bias tee mounts to bracket with screw hardware securing bias tee cover.
- Triax cables exit north toward triax manifold on 11/12K.
- Both brackets are symmetrical.
- See SQ-103-202-11 for cable.

SQ-123-852-01 — Bracket, Bias-Tee, RF Positioner, East/West,12K

- Bracket enables the mounting of Agilent bias tees 11612B K11 and 11612B K21 on the arm of an East or West RF positioner for the Summit 11/12K.
- Bias tee inputs face the center of the positioner arm.
- Bias tee outputs face outwards from the arm.
- Bias connecters face back alongside the positioner.
- Bias tees are mounted to bracket with screw hardware that secures the bias tee cover.
- Supplied screws attach bracket to arm.
- Includes 2 shutters (top hat).
- Cables are not included.

SQ-124-285-01 — Bolt-Down Kit, South, MPH, 11K/12K

- Includes a mounting plate and bolt-down hardware for configuring SQ-MPH positioner in south location on a Summit 11/12K platen.
- Designed to be compatible with XF positioners.
- Replaces magnetic base on SQ-MPHM-4BL-TH-01 positioner.
- Can be field installed.

SQ-126-118-01 — Platen Rails Kit, RF Positioner, 12K

- Contains mounting rails and hardware that attach to the platen to mount one 11/12K RF positioner.
- Compatible with 114-746B, 114-845B, and 115-597B.

SQ-132-026-01 — RF Positioner Arm Kit, 0°, Long Shaft

- Arm for RF East/West positioner with extended shaft compatible with 12-sided TopHat.
- Depending on probe type, may not be compatible with standard 8 sided TopHat.

SQ-132-026-02 — RF Positioner Arm Kit, 90°, Long Shaft

- Arm for an RF North/South positioner with extended shaft compatible with 12-sided TopHat.
- Depending on probe type, may not be compatible with standard 8 sided TopHat.

SQ-107-088-02 — Bracket, Bias-Tee Mount, North, 11/12K

- Bracket designed for use with the North RF positioner on a Summit 11/12K station for mounting Agilent 11612V bias tee.
- Includes 4 positioner mount thumbscrews.

SQ-113-569-01 — Shaft Extension, .688" Set

- Set of four shaft extenders for N,S,E&W positioners on a Summit 12K with tilt bridge.

SQ-117-617-03 — MPH Conversion Kit, Right Angle

- Field upgrade kit for adding 90-degree bracket used on SQ-MPHM-4BL-TH-03 to any existing MPH positioner.
- Not recommended for vacuum-based MPH positioners. Longer probe arm reach may cause tipping. Use this kit on such a positioner with caution.
- Customer to install kit onto an existing positioner.
- Positioner must be ordered separately.
- Designed for use with -4BL positioner.

SQ-120-704-01 — Adapter Kit, 11/12K XF Positioners to M42

- Adapter plates and offset arms enable the Summit 11/12K East and West XF positioners (PNs 113-130 and 113-120) to be used on a Model 42 station.

SQ-120-709-01 — Bracket, Bias Network, Dual, South, 11/12K

- Plate and bracket assembly that enables the mounting of Agilent Bias Networks (tees) 11612B K11 and 11612B K21 on the arm of a South RF positioner for the Summit 11/12K.
- Bias networks are mounted to assembly with screw hardware securing the bias network covers.
- Supplied screws attach the networks to the assembly.
- Includes 2 shutters (TopHat).
- Cables are not included.

SQ-127-186-01 — Bracket Mount, Agilent Mixer to MPH

- Mounting bracket enables mounting Agilent 11970 Series Harmonic Mixers to MPH positioner with extra force magnetic base (SQ-105-111-01).
- Compatible with the Agilent mixer connected to an ACP Angle probe via Agilent's V/W281 mmWave- to Coax Adapter and Anritsu Bias Tee.
- The MPH with the bracket cannot be used in the north position and will be marginal in the NNW and NNE positions.
- This is the mounting bracket ONLY and DOES NOT INCLUDE MPH positioner, cables, mixers, adapters and bias tees are not included.

SQ-129-024-02 — Base Only, Magnetic, 101-267, R3200

- Magnetic base for a 9K positioner when used on a R3200 station.
- Based on the base used in SQ-101-267-01, which is similar to the magnetic base used on an MH5.

SQ-129-026-02 — Mount, Anritsu Bias-Tee, North/South, RF Positioner

- Mounting bracket for 2 Anritsu (k250) Bias tees on a North or South RF positioner on an S300.
- Positioners and cables are not included.

SQ-129-033-01 — Arm Only, RF Positioner, North/South, 90, Mirror, LWPS

- Mirror image of the standard North/South arm on an RF positioner.
- Probe mount is not included.
- For use when a south attack is required using an RF positioner in the southeast location on the platen, or when a north attack is required with the RF positioner in a northwest location on the platen.
- Similar to arm used in SQ-114-845-10.

SQ-129-651-01 — Conversion Kit, RF Positioner, Non B, North/South to East/West

- Arm assembly and mounting plate for converting a North/South RF positioner 114-845 to an East/West positioner 114-746.
- The micrometers will be on the opposite side compared to a standard 114-746.
- The arm comes completely assembled
- Some exchange of old and new mounting plates is required.

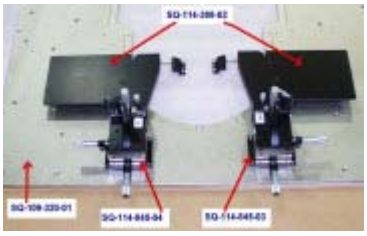
SQ-MMM-04/6-01 — MMM-04/6, Mirror Image

- This is a mirror-image MMM-04/6.
- Used with a standard MMM-04/6 positioner to enable dual North MH5 positioners on an RF1.

SQ-114-324-02 — 9100 North/South to 11000 North/South, Positioner Upgrade

- Parts for upgrading an 101-268 positioner to 105-562 positioner.
- Upgrade uses the existing X- -Z positioner, but adds new planarizable arm and top plate mounting hardware.

SQ-114-388-02 — Shelf, ATN, Summit Probe Station, Use With SQ-114-845-03



- Supports ATN (ELM Style) smaller tuners.
- For use on SQ-114-845-03 and SQ-114-845-04 positioners.

SQ-116-364-01 — Spacer, RF-1, MMM to MH5/MS1 for FPC Probe

- Required when configuring RF-1 probe station with MS1/MH5 positioners and FPC probes.

- Requires SQ-116-364-01 spacer and 104-913 FPC adapter for each positioner ordered.
- Compatible with MMM-01 and MMM-02 probe mounts only; not the MMM-01/6 and MMM-02/6.

SQ-117-838B-03 North/South RF Positioner, Custom Drop Down, Photonic Platen

- 117-838B RF positioner with custom drop down arm for use on the SQ-120-703-04 photonic station.
- Requires SQ- 126-112-01 Adapter plate to mount to a breadboard with M6 holes on a 25mm X 25mm pattern.

SQ-118-145-01 — Upgrade Positioner, Summit 9K, Summit 11/12K

- Used to upgrade Summit 101-543 East/West positioner to Summit 114-746 East/West positioner.
- Uses the existing X-Y-Z positioner, but adds new planarizable arm and top plate mounting hardware.

SQ-120-174-02 — Bias-Tee Bracket, RF Positioner, HP 11612B, 12K

- Bracket designed to mount between RF positioner probe mount arm and support.
- Mounts the HP (Agilent) bias tee (11612B Options K11 or K21) in a vertical position.(longer screws provided) .
- The bias tee is mounted to bracket with screw hardware that secures the bias tee cover.
- Cutouts in the bracket provide better Z and planarity micrometer control.
- Triax Cables exit north toward triax manifold on 11/12K.
- Brackets are symmetrical.
- See SQ-103-202-11 for cable.

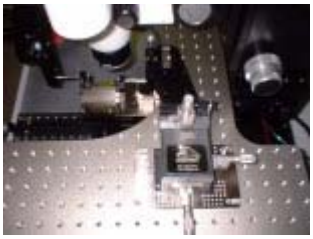
SQ-123-852-02 — Bias-Tee Bracket, East/West RF Positioner, Angled, S300

- Bracket enables mounting of Agilent Bias tees (STYLE TBD) on the arm of an East or West RF positioner for the S300.
- Bias tee inputs face, at an angle, to the center of the positioner arm. Outputs face, at an angle, outwards from the arm.
- The bias connecters face up.
- Bias tees are mounted to bracket with screw hardware that holds bias tee cover on.
- Provided screws attach bracket to arm.
- Includes2 shutters (top hat).
- Cables are not included.

SQ-124-347-01 — LWP Adapter, MH2, R25

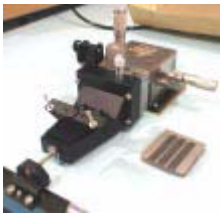
- Mounts a standard LWP on a MH2 positioner, usable on a R-2500 station.
- Micrometer-driven planarization adjustment is not included.
- Suitability of this adapter in any other application must be verified prior to ordering.

SQ-126-112-01 — Adapter Plate, RF Positioner, Photonic Platen



- Adapter plate for mounting an RF positioner to an optical breadboard with M6 holes on a 25mm X 25mm pattern.
- A matrix of holes in the plate to allow adjustment of the positioner on the platen.
- Compatible with SQ-117-838B-03 and SQ-120-703-04.

SQ-129-026-01 — Bias-Tee Bracket, Anritsu, East/West RF Positioner



- Bracket for mounting 2 Anritsu (k250) bias tees on a East or West RF positioner on an S300.
- Includes 3 slot insert for Top Hat.
- Positioner and cables. are not included.
- Use SQ-129-646-01 between probe and bias tee.

SQ-129-024-01 — Base Only, Magnetic,101-543, R3200

- Magnetic base for a 9K positioner when used on a R3200 station.
- Based on the base used in SQ-101-267-01, which is similar to the Mag base used on an MH5.

SQ-129-669-01 — Kit, SQ-MPHF-4BL-TH-03 to SQ-MPHF-4BL-TH-05

- Upgrade kit enables conversion of SQ-MPHF-4BL-TH-03 positioner to the equivalent of the SQ-MPHF-4BL-TH-05.

XF Support

SQ-129-029-01 — Z Positioner, Offset Arm, Summit, S300

- Z positioner for the 113-120 (West XF) or 113-130 (East XF) with an arm to offset the probe Z knob for straight cable exit.
- Complete probe Z mechanism.
- If a trade in option is requested, contact specials group.

HV Probe

SQ-120-416-04 — High Voltage Option (HV) DCP-HTR, Left DCM

- Kit containing a custom integrated "High Voltage DCP-HTR styled probe body and HV triax adapter" mounted on a left-handed version magnetic DCM positioner.
- HV triax cable is used between the triax adapter and a custom HV triax manifold (sold separately).
- Compatible with Microchambered Summit 11/12K station.

SQ-120-416-05 — High Voltage Option (HV) DCP-HTR, Right DCM

- This kit contains a custom integrated "High Voltage DCP-HTR styled probe body and HV triax adapter" mounted on a right-handed version magnetic DCM positioner,.
- HV triax cable is used between the triax adapter and a custom HV triax manifold (sold separately).
- Compatible with a Micro-Chambered Summit 11/12K station.

Inker

SQ-RAC-70/M-02 — Xander Inker Kit for MD Positioner, R48, R61, R55

- Xandex Inker Kit for MD positioner provides inking capability for the Alessi R55, R61 and R48 Probe Stations.
- 8.5-foot inker cable plugs into the Inker port in ECX-56 box.

Custom Cables

DC Cables

SP-123-851-01 — Cable Assembly, 48-Inch, SMA to Molex

- 48-inch cable assembly.
- Male SMA connector on one end and Molex housing on the other to connect to the Eyepass probe.

SQ-104-330-LC-01 — Cable Assembly, 20 cm, Low I, Mini Triax/Mini Triax

- 2O cm version of 104-330-LC with mini-triax on both ends.

SQ-104-330-LC-03 — Cable Assembly, 150 cm (59-Inch), Low I, Standard Triax/Mini Triax

- 15O cm version of 104-330-LC.

SQ-104-330-LC-04 — Cable Assembly, 36-Inch, Low I, Standard Triax/Mini Triax

- 36-inch version of the 104-330-LC.

SQ-104-330-LC-05 — Cable Assembly, 1 m, Low I, Standard Triax/Mini Triax

- 1 m version of 104-330-LC.
- Low noise triax cable with large to small triax connectors.

SQ-104-330-LC-08 — Cable Assembly, 14-Inch Low I, , Mini Triax/Mini Triax

- 14-inch nominal length version of 104-330-LC, with mini-triax connectors on both ends.

SQ-104-330-LC-09 — Cable Assembly, 24-Inch, Low I, Standard Triax/Standard Triax

- 24-inch version of 104-330-LC cable assembly with standard triax connector on each end.

SQ-105-540-03 — Cable Assembly, BNC to SSMC, Voltage Sense, 2520

- Short BNC to SSMC cable assembly.
- Nominal 50 ohm coax, used as a Voltage Sense connection between a Keithley 2520 Pulsed Laser Diode Test System's remote test head and a DCP probe.

SQ-105-540-04 — Cable Assembly, BNC to SSMC, 25.0 cm

- 105-540 (BNC to SSMC) cable assembly is a nominal 25 cm.

SQ-105-540-05 — Cable, 10.0 cm, BNC to SSMC

- 105-540 (BNC to SSMC) cable assembly is a nominal 10 cm.

SQ-105-540-07 — Cable Assembly, 6-Inch, BNC to SSMC

- 105-540 (BNC to SSMC) cable assembly is a nominal 6-inch.

SQ-110-983-02 — Coax Cable, 2 m (6.5 ft), Male BNC Connectors

- 50 ohm coax cable (RG58C/U or similar) is a nominal 2 m (78.7-inch)

SQ-111-541-01 — Triax Cable, 3 m

- Based on 104-334, with 3 m cable.
- Uses same cable and connectors as 104-334.

SQ-114-755-01 — Cable Assembly, 3 m, Triax Extension, Male-Male

- Use 106-560 triax adapter, female to female, to convert from (male) polarity.
- Not a low noise triax cable.

SQ-116-032-02 — Cable, Triax to Pin Jack, 3-Foot

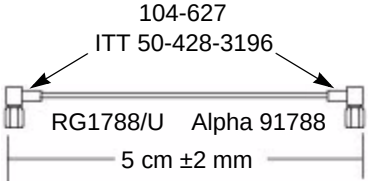
- 3-foot cable with triax connector (ase PE5-32) on one end and pin jack on the other.
- Cable has alligator clip to shield, guard is floating.

SQ-126-111-01 — Cable, Triax, 4.75-Inch, Low Noise

- 4.75-inch nominal low-noise triax cable assembly.
- Standard-triax connector on one end and a mini-triax connector on the other end.

SQ-126-124-01 — Cable, SSMC to SSMC, 5.0 cm

- Cable with right angle SSMC connector on each end.
- Cable length is 5.0 cm ±2 mm.



SQ-126-134-01 — Cable, BNC to SSMC, Current Output, 2520

- Short BNC to SSMC cable assembly
- Nominal 15 ohm coax, to be used as a current output connection between a Keithley 2520 Pulsed Laser Diode Test System's remote test head and a DCP probe.

SQ-127-985-01 — Cable Assembly, SMC (F) 90°, BNC (M) Straight, 2 m

- 2 m (6.5 ft) coax cable with an SMC female 90° connector on one end and a BNC male straight connector on the other.
- Use with Anritsu bias tee model K/V 250 for the DC IN connection.

SQ-129-642-01 — Cable Assembly, 36-Inch Triax, Standard to Standard, 11612T Bias

- 36-inch triax cable with standard triax connectors on each end.
- Cable can be used as Bias cable on Agilent 11612T Bias Tee.
- Cable is similar to Keithley cable model 7078-TRX-3.

SQ-129-647-01 — Cable Assembly, 8 cm, SMA (F) Straight to SSMC (M) 90°

- 8 cm coax cable assembly.
- Female SMA connector on one end and a 90° male SSMC connector on the other.

SQ-131-533-01 — Cable Assembly, Coax, 2-Inch, SSMC (90°) to SSMC (90°)

- 2-inch cable assembly with right angle SSMC connectors on each end.
- Designed to connect two DCP probes together.

RF Cables

SP-010-044-03 — Cable Assembly, 40 GHz, 9-Inch Semi-Rigid K (M) to K (M) 90°

- Use for Summit 11/12K or PS21 with North/South positioners using a SP-107-088-00 mounting plate for HP 11612A Bias Tee.

SP-010-044-04 — Cable Assembly, 40 GHz, 7-Inch Semi-Rigid K (M) to K (M) 90°

- Use for Summit 11/12K with East/West positioners using a SP-107-088-00 mounting plate for HP 11612A Bias Tee.

SP-101-162-01 — 12-Inch RF Cable

- 12-inch version of 101-162 RF cable instead of the standard 48-inch.

SP-101-162-26 — Cable Assembly, 40 GHz, 26-Inch, K(F) Straight, K (M) 90°

- 40 GHz flexible cable assembly.
- 26-inch version of the 101-162 RF cable.

SP-104-540-02 — Cable, Male/Male Connector

- 104-540 cable with male/male 1.85 mm connector configuration (instead of standard male/female connector configuration).
- Standard 104-540 cable specifications apply.

SP-106-877-04 — Cable Assembly, 40 GHz, 63-Inch Flexible, Elbow (M), Straight (F)

- 160 cm version of 106-877, 'K' connector male/female.
- Elbow on male end.

SQ-101-162-02 — Cable Assembly, 40 GHz, 9-Inch Flexible, Straight K, M/M

- 9-inch cable assembly with male straight K (2.92 mm) connectors on both ends.

SQ-101-162-07 — Cable Assembly, 40 GHz, 72-Inch, K (F) Straight, K (M) 90°

- 40 GHz flexible cable assembly.
- Cable is a nominal 72 inches, with a 2.92 mm straight socket “K” connector and a 2.92 mm right angle pin “K” connector.

SQ-101-162-09 — Cable Assembly, 40 GHz, 48-Inch, K (M) 90°, K (M) 90°, 270° Offset

- 40 GHz flexible cable assembly.
- Cable is a nominal 48 inches, with right angle pin “K” connector at both ends.
- The right angle connector direction has been offset by 270° ±20°.

SQ-101-162-27 — Cable Assembly, 40 GHz, 2 m (6.5 ft), K (F) Straight, K (M) 90°

- 40 GHz flexible cable assembly.
- Cable is a nominal 78.7 inches (2 m) with a 2.92 mm straight socket “K” connector on one end and 2.92 mm 90° pin “K” connector on the other end.
- Cable does not have the extended ferrule.
- The “K” connector is compatible with 3.5 mm connectors.

SQ-101-162-28 — Cable Assembly, 40 GHz, 52-Inch, K (F) Straight, K (M) 90°

- 40 GHz flexible cable assembly.
- Cable is a nominal 52.0 inches with a 2.92 mm straight socket (F) “K” connector on one end and 2.92 mm 90° pin (M) “K” connector on the other end.
- Cable does not have the extended ferrule.
- The “K” connector is compatible with 3.5 mm connectors.

SQ-103-202-02 — Cable Assembly, 50 GHz, 52-Inch

- 52.0-inch with 2.4 mm (female) straight - 2.4 mm (male) 90°.

SQ-103-202-12 — Cable Assembly, 50 GHz, 60-Inch

- 60 inches (5 feet), with 2.4 mm straight socket connector and 2.4 mm right angle pin connector.

SQ-103-202-15 — Cable Assembly, 50 GHz, 20-Inch, 2.4 mm (M) Straight to 2.4 mm (M) Straight

- 20-inch 50 GHz flexible cable assembly with 2.4 mm straight pin (male) and 2.4 mm straight pin (male) connectors.

SQ-103-202-16 — Cable Assembly, 50 GHz, 35.4-Inch, 2.4 mm (F) Straight to 2.4 mm (M) 90°

- 35.4-inch (900 mm), 50 GHz flexible cable assembly with 2.4 mm straight socket (female) connector on one end and 2.4 mm 90° pin (male) connector on the other.

SQ-103-355-01 — Cable Assembly, 18 GHz, 1.8 m, 3.5 mm (M) Straight to 3.5 mm (M) Straight

- 8 GHz flexible cable assembly is a nominal 1.8 m (70.8 inches) with 3.5 mm straight pin connectors on each end. Similar to 103-355.

SQ-104-540-01 — Cable Assembly, 65 GHz, 15-Inch 1.85 mm (M) to 1.85 mm (M) 90°

- Flexible cable assembly.

SQ-104-540-04 — Cable Assembly, 65 GHz, 48-Inch Flexible, M/F

- 48-inch version of the 104-540 flexible 65 GHz cable assembly.

SQ-104-540-12 — Cable Assembly, 65 GHz, 36-Inch, 1.85mm (M), 1.85 mm (M) 90°

- 65 GHz flexible cable assembly.
- Cable is a nominal 36 inches with a 1.85 mm male (pin) connector on one end and a 1.85 mm 90° male (pin) on the other end.

SQ-104-540-15 — Cable Assembly, Absolute Match, 65GHz, 18-Inch, 1.85 mm (M) Straight, 1.85 mm (M) 90°

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 18 inches, with a 1.85 mm straight pin (male) connector and 1.85 mm right angle pin (male) connector.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-104-540-16 — Cable Assembly, Absolute Match, 65GHz, 36-Inch, 1.85 mm (M) Straight, 1.85 mm (M) Straight

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 36 inches, with a 1.85 mm straight pin (male) connector on each end.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-104-540-17 — Cable Assembly, Absolute Match, 65GHz, 36-Inch, 1.85 mm (M) Straight, 1.85 mm (M) 90°

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 36 inches, with a 1.85 mm straight pin (male) connector and a 1.85 mm right angle pin (male) connector.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-114-233-04 — Cable, 40 GHz K (M) Straight K (M) Swept 90°, 30-Inch

- 40 GHz cable.

SQ-114-912-02 — Cable, 50 GHz, 20.0-Inch 2.4 mm (M) Straight– 2.4 mm (M) 90°

- 50 GHz cable.

SQ-116-618-01 — Cable, 50 GHz 2.4 mm 90 (M) - 2.4 mm 90(M), 8-Inch

- 90° elbows have zero offset angle.

SQ-123-845-01 — Adapter, 2.4 mm (M) to 2.92 mm (F)

- Precision adapter with a 2.4 mm male connector on one side and a 2.92 mm (K) female connector on the other.

SQ-123-848-01 — Cable, 50 GHz, 60-Inch, With 2.4 mm (M) 90° Ends, 90° Offset

- 50 GHz flexible cable, 60 inches, with 2.4 mm swept 90° male connectors at each end.
- The connectors are offset from each other by 90° ±20°.

SQ-124-084-03 — Cable Assembly, 40 GHz, 52-Inch, K (F) Straight, K (M) Straight

- 40 GHz Cable Assembly that is a nominal 52 inches with a K (2.92 mm) socket (female) straight connector on one end and a K (2.92 mm) pin (male) straight connector on the other end.
- (52-inch version of the standard 124-084 cable assembly)

SQ-124-085-03 — Cable, 50 GHz, 31.5-Inch Straight 2.4 (F) to Straight 2.4 (M)

- Nominal 80 cm (31.5-inch) version of standard 50 GHz cable assembly 124-085.
- 2.4 mm straight female connecter and 2.4 mm straight male connecter.

SQ-124-086-01 — Cable Assembly, 50 GHz, 7-Inch, 2.4 (M) Straight, 2.4 (M) Straight

- 50 GHz flexible cable assembly that is a nominal 7 inches.
- 2.4 mm straight pin (male) connector on both ends.

SQ-124-088-01 — Cable Assembly, 40 GHz, 60 cm, K (M) Straight to K (M) 90°

- 40 GHz flexible cable assembly is 60 cm (23.6-inch) with K straight pin (male) connector on one end and K right angle (90°) pin (male) connector on the other end.

SQ-124-089-02 — Cable Assembly, 40 GHz, 7.0-Inch, K (M) Straight to K (M) Straight

- 40 GHz flexible cable assembly that is a nominal 7 inches with K male (straight pin) connectors on each end.

SQ-127-176-01 — Cable Assembly, 67 GHz, 25 cm, Semi-Rigid, V (M) to V (M)

- Semi rigid cable with male V connectors for use on the PS21 or PS300, in conjunction with the Agilent 11612A bias tee and SQ bias tee bracket.
- Cable is delivered as a straight assembly in a tube.
- *Customer will need to bend the cable using the tube as a fixture to set the minimum bend radius. Cable bending should be done very gently, and a cable cal should be done before and after to ensure that the bending process did not damage the cable.*

SQ-129-008-01 — Cable, Coax, Semi-Rigid, DC to 67 GHz, V (M), V (M)

- Semi-rigid coax with a frequency range of DC to 67 GHz.
- Similar to Anritsu V120 RF cable.
- Compatible with SQ-129-007-01 and SQ-127-186-01.

SQ-129-025-01 — Cable, 40 GHz, 9-Inch, With 2.92 mm (M) 90° Ends, 90° Offset

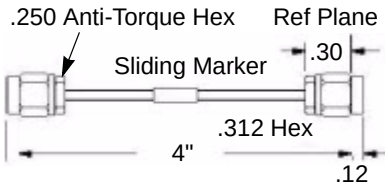
- 40 GHz flexible cable, 9 inches, with 2.92 mm (K) swept 90° male (pin) connectors at each end.
- Connectors are offset from each other by 90° ±10°.

SQ-129-025-02 — Cable, 40 GHz, 9-Inch, With 2.92 mm (M) 90° Ends 270° Offset

- 40 GHz flexible cable, 9 inches, with 2.92 mm (K) swept 90 male (pin) connectors at each end.
- Connectors are offset from each other by 270° ±10°.

SQ-129-646-01 — Coax Cable Semiflex Assembly, K (M), K (M), 4-Inch

- 4-inch hand-formable semi-flex coax cable.
- Male K connectors on each end.



SQ-131-532-01 — Cable, Coax, Semi-Rigid, DC to 40 GHz, K (M), K (M), 15 cm

- Semi-rigid coax with a frequency range of DC to 40 GHz.
- Similar to Anritsu K120 RF cable.
- Compatible with SQ-107-088-01.
- Cable is 15 cm.
- Cable length is straight and may need to be bent by customer for proper fit.

SP-106-877-02 — Cable Assembly, 40 GHz, 60-Inch Flexible, Elbow (M), Straight (F)

- Cable is 5 ft version of 106-877, 'K' connector male/female.
- Elbow on male end.

SQ-101-162-06 — Cable Assembly, Absolute Match, 40 GHz, 72-Inch, K (F) Straight, K (M) 90°

- Absolute phase-matched 40 GHz flexible cable assembly.
- Cable is a nominal 72 inches, with a 2.92 mm straight socket "K" connector and a 2.92 mm right angle pin "K" connector.
- Phase match tolerance is ±2.5 pico seconds.

SQ-101-162-16 — Cable Assembly, 40 GHz, 16-Inch, Flexible, M/F

- 16-inch version of the 101-162 cable assembly.

SQ-101-162-22 — Cable Assembly, Absolute Match, 40 GHz, 12-Inch, K (M) Straight, K (M) Straight

- Absolute phase-matched 40 GHz flexible cable assembly.
- Cable is a nominal 12 inches, with a 2.92 mm straight pin (male) "K" connector on each end.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-101-162-23 — Cable Assembly, Absolute Match, 40GHz, 24-Inch, K (M) Straight, K (M) Straight

- Absolute phase-matched 40 GHz flexible cable assembly.
- Cable is a nominal 24 inches, with a 2.92 mm straight pin (male) "K" connector on each end.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-101-162-24 — Cable Assembly, Absolute Match, 40GHz, 48-Inch, K (M) Straight, K (M) Straight

- Absolute phase-matched 40 GHz flexible cable assembly.
- Cable is a nominal 48 inches, with a 2.92 mm straight pin (male) "K" connector on each end.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-101-162-25 — Cable Assembly, Absolute Match, 40GHz, 48-Inch, K (M) Straight, K (M) 90°

- Absolute phase-matched 40 GHz flexible cable assembly.
- Cable is a nominal 48 inches, with a 2.92 mm straight pin (male) "K" connector and a 2.92 mm right angle pin (male) "K" connector.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-103-202-01 — Cable, 50 GHz, 5-Inch 2.4 mm(F) Straight–2.4 mm (M) 90°

- 50 GHz cable.

SQ-103-202-03 — Cable Assembly, 50 GHz, 15.0-Inch 2.4 mm (M)–2.4 mm (M) 90°

- Flexible cable assembly.

SQ-103-202-04 — Cable Assembly, 50 GHz, 2 m (6.5 ft), 2.4 (F) Straight to 2.4 (M) 90°

- Flexible cable assembly.
- Guaranteed insertion loss at 50 GHz is 9.98 dB.
- Typical insertion loss at 50 GHz is 8.25 dB.
- Return loss 15.00 dB

SQ-103-202-05 — 50 GHz Cable, 48-Inch, 2.4 mm (M) Straight to 2.4 mm (M) 90°

- 48-inch 50 GHz cable.

SQ-103-202-07 — Cable, 50 GHz, 9-Inch, 2.4 mm (M) Straight to 2.4 mm (M) 90°

- 9-inch 50 GHz cable.

SQ-103-202-11 — Cable Assembly, 50 GHz, 8-Inch, 2.4 mm (M) Straight to 2.4 mm (M) 90°

- 50 GHz flexible cable assembly with 2.4 mm straight pin and 2.4 mm right angle pin connectors.
- Refer to SQ-120-174-01 Bias Tee Bracket. This cable length will work with this bracket and the Bias Tees.

SQ-104-540-03 — Cable Assembly, 65 GHz, 20 cm 1.85 mm (M)– 1.85 mm(M)90°

- Flexible cable assembly.

SQ-104-540-06 — Cable Assembly, Absolute Match, 65 GHz, 72-Inch, 1.85 mm (F) Straight, 1.85 mm(M) 90°

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 72 inches, with a 1.85 mm straight socket connector and a 1.85 mm right angle pin connector.
- Phase match tolerance is ±2.5 pico seconds.

SQ-104-540-08 — Cable Assembly, Absolute Match, 65 GHz, 24-Inch, 1.85 mm (M) Straight, 1.85 mm (M) Straight

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 24 inches, with a 1.85 mm straight pin connector on both ends.
- Phase match tolerance is ±2.5 pico seconds.

SQ-104-540-09 — Cable Assembly, Absolute Match, 65 GHz, 18-Inch, 1.85 mm (M) Straight, 1.85 mm (M) Straight

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 18 inches, with a 1.85 mm straight pin connector on both ends.
- Phase match tolerance is ±2.5 pico seconds.

SQ-104-540-10 — Cable Assembly, Absolute Match, 65 GHz, 12-Inch, 1.85 mm (M) Straight, 1.85 mm (M) Straight

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 12 inches, with a 1.85 mm straight pin connector on both ends.
- Phase match tolerance is ±2.5 pico seconds.

SQ-104-540-11 — Cable Assembly, Absolute Match, 65 GHz, 30-Inch, 1.85 mm (M) Straight, 1.85 mm (M) 90°

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 30 inches, with a 1.85 mm straight pin
- 40 GHz 4.5 inch cable.

SQ-104-540-14 — Cable Assembly, Absolute Match, 65 GHz, 8-Inch, 1.85 mm (M) Straight, 1.85 mm (M) Straight

- Absolute phase-matched 65 GHz flexible cable assembly.
- Cable is a nominal 8 inches, with a 1.85 mm straight pin (male) connector on each end.
- Phase match tolerance is ±2.5 pico seconds @ 40 GHz.

SQ-114-233-03 — Cable, 40 GHz, 8-Inch, K (M) Straight K (M) Swept 90°

- 40 GHz cable.

SQ-114-233-05 — Cable, 40 GHz, 48-Inch, K (M) Straight K (M) Swept 90°

- 40 GHz 48 inch cable.
- 2.92 “K” straight male to a 2.92 mm “K” 90° elbow.

SQ-114-233-06 — Cable, 40 GHz, 15-Inch, K (M) Straight K (M) Swept 90°

- 40 GHz 15 inch cable.
- 2.92 mm “K” straight male to a 2.92 mm “K” 90° elbow.

SQ-114-233-09 — Cable Assembly, 40 GHz, 12-Inch, K (M) Straight, K (M)90°

- 40 GHz flexible cable assembly.
- Cable is a nominal 12 inches, with a 2.92 mm straight pin “K” connector and a 2.92 mm right angle pin “K” connector.
- SMA and K connectors must be compatible.

SQ-114-912-01 — Cable, 50 GHz, 31.0-Inch 2.4 mm (F) Straight–2.4 mm (M) 90°

- 50 GHz 31 inch cable.

SQ-115-030-01 — Cable, 40 GHz, 4.5-Inch K (F) Straight–K (M) 90°

- 40 GHz 4.5 inch cable.

SQ-115-031-01 — Cable, 40 GHz, 5.0-Inch 2.4 mm (M) Straight–K (M) 90°

- 40 GHz 5 inch cable.

SQ-115-031-02 — Cable, 40 GHz, 6.5-Inch 2.4 mm (M) Straight–K (M) 90°

- 40 GHz 6.5 inch cable.

SQ-127-177-01 — Cable Assembly, 67 GHz, 15 cm, Semi-Rigid, V(M) to V(M)

- Semi rigid cable with male V connectors for use on the Summit 11/12K systems, in conjunction with the Agilent 11612A bias tee and SQ bias tee bracket.
- Cable is delivered as a straight assembly in a tube.
- *Customer will need to bend the cable using the tube as a fixture to set the minimum bend radius. Cable bending should be done very gently, and a cable cal should be done before and after to ensure that the bending process did not damage the cable.*

SQ-129-008-02 — Cable, Coax, Semi-Rigid, DC to 67 GHz, V(M), V(M)

- Semi-rigid coax with a frequency range of DC to 67 GHz.
- Similar to Anritsu V120 RF cable.
- Compatible with 107-088.
- Cable is 15 cm.
- Cable is straight and may require bending by the customer to match their application.

SQ-101-162-26 — Cable Assembly, 40 GHz, 59.1-Inch, K (M) Straight, K (M) 90°

- 40 GHz flexible cable assembly.
- Cable is a nominal 59.1 inches (1.5 m) with a 2.92 mm straight pin “K” connector on one end and 2.92 mm 90° pin “K” connector on the other end. This cable does not have the extended ferrule.

Cable Accessories

SQ-115-331-03 — Cable Holding Clamp, Vacuum Base

- Cable support hold-down clamp with MH2-style vacuum base.
- Easy adjustable height in 1/4-inch increments from approximately 3.3-inch minium to 7.5-inch.
- Height can be increased with additional spacers (not included).

SQ-129-644-01 — Terminator, 50 OHM, 5W, SMA Male

- 50 ohm terminator with a SMA male connector and a power rating of 5 Watts.
- Compatible with SQ-129-643-01.

Harnesses

SP-110-923-01 — Harness, Coax, 25-Line, 1 ft, Probe Card Adapter

- Wiring harness to interface standard probe card edge connectors to 108-719 triax cable harness.
- Male and female guide posts are installed using washers and a hex nut.
- Wire assemblies are installed in pin locations 1 through 25.
- Pigtail ends of the wires are prepared in the same manner as the blade assemblies for the low current probe card (108-870) except ground wire is removed at end.
- Testing is the same as the low current probe card assembly.
- 4 cable ties (P/N 110-857) included with shipped assembly.

SP-110-923-02 — Wiring Harness, Coax, 25-Line, 12-Inch Adapter

- Wiring harness (12-inch with custom edge connector and wiring) for customer to interface standard probe cards to CMI triax cable harness (108-719).
- Edge connector and wiring diagram must be supplied by customer when the order is placed.
- Male and female guide posts, and wire assemblies (pin 1 to 25) must be installed.
- Pigtail ends of the wires are prepared in the same manner as the blade assemblies for the low-current probe card (108-870), and soldered to the edge connector per the customer-supplied wiring diagram.
- Testing is the same as the low current probe card assembly.
- 4 cable ties (P/N 110-857) included with shipped assembly.

SP-110-923-03 — Wiring Harness, Coax, 25-Line, 6-Inch Adapter

- Wiring harness (6-inch with custom edge connector and wiring) for customer to interface standard probe cards to our triax cable harness (108-719).
- Edge connector and wiring diagram msut be supplied by customer when the order is placed.
- Male and female guide posts, and wire assemblies (pin 1 to 25) must be installed.
- Pigtail ends of the wires are prepared in the same manner as the blade assemblies for the low-current probe card (108-870), and soldered to the edge connector per the customer-supplied wiring diagram.
- Testing is the same as the low current probe card assembly.
- 4 cable ties (P/N 110-857) included with shipped assembly.

SP-110-923-06 — Harness, Coax, 48-Line, 12-Inch Adapter, 48-Pin Edge

- Dedicated pin-out wiring harness to 48 pin edge connector.
- Edge connector pin numbers 1 through 24 go to LC Harness Block ‘A’ #1 through #24.
- Connector pin numbers A through AB go to LC Harness Block ‘B’ #1 through #24.
- 48 pin edge connector accepts PCBs from .054 through .074-inch thick.
- Pin spacing is 0.156-inch (3.96 mm).
- Includes strain relief.
- Interfaces to CMI standard cable harness (108-719).

SP-110-923-07 — Harness, Triax, 24-Line, 8-Inch, Probe Card Adapter

- 24-line wiring harness for customer to interface standard probe card edge connectors to our triax cable harness (108-719).
- Cable length is 8-inch from the end of the connector body.
- Triax shields will be tied to the connector metal bracket.
- Pigtail ends of the wires are prepared in the same manner as the blade assemblies for the low-current probe card (108-870) (guard and shield removed at end leaving center conductor).
- Testing is the same as the low current probe card assembly.

SP-110-923-08 — Wiring Harness, Coax, 48-Line, 12-Inch, 48-Pin Edge, Shorted

- Similar to SP-110-923-06 but with both inner and outer conductors of each line soldered together to each edge connector pin.
- Dedicated pin-out wiring harness to 48 pin edge connector.
- Edge connector pin numbers 1 through 24 go to LC Harness Block 'A' #1 through #24.
- Connector pin numbers A through AB go to LC Harness Block 'B' #1 through #24.
- 48 pin edge connector accepts PCBs from .054 through .074-inch thick.
- Pin spacing is 0.156-inch (3.96 mm).
- Includes strain relief.
- Interfaces to CMI standard cable harness (108-719).

SP-110-923-09 — Harness, Coax, 35-Line, 12-Inch Adapter, 70-Pin Edge

- 12-inch dedicated pin-out wiring harness, triax block to 70 pin edge connector.
- Coax cable is connected to the edge connector (105-791) with center conductor to the A side and the shield of that line connected to the B side of that pin location.
- Interfaces to CMI standard cable harness.
- Edge connector pin location numbers 1 through 24 go to LC Harness Block 'A' #1 through #24.
- Edge connector pin location numbers 24 through 35 go to LC Harness Block 'B' #1 through #11.

SQ-108-719-01 — Cable Assembly, Low Noise, Harness, 25-Pin, No Edge Sense

- Special triax harness for low leakage probe card.
- Pin 25 configured the same as pins 1 through 24. (Pin 25 is normally used for edge sense.)

SQ-108-719-04 — Harness, Triax Cable, 24 Line, 2 m (6.5 ft), Probe Card, Open Shield

- Similar to 108-719 triax cable harness with outer triax shields open at LLPC connector block.

SQ-108-719-06 — Harness, Triax Cable, 1 Channel, 3 m, Low Noise

- Harness is similar to 108-719.
- Length is a nominal 3 m (9.8 ft).
- 1 channel, located in the first location of the connector block.
- A ground wire is in its normal location (position 26).
- No Edge Sense channel or connector.

SQ-108-719-08 — Harness, Triax Cable, 24-Line, 18-Inch, Stripped Ends

- Nominal 18 inch version of the 108-719 low noise harness (without the triax connectors).
- The open triax cable end will be stripped back.
- Customer to provide detail of requirements for stripped ends at time of order.

SQ-108-719-09 — Harness, Triax Cable, 24-Line, 4 m (13 ft) for Probe Card

- Nominal 4 m ±1 cm version of 108-719 low noise harness.

SQ-114-757-02 — Cable Assembly, Low Noise Harness, 48 Channel HP16077A

- Two m, 48 Channel non-kelvin extension harness for use with HP4085 switching matrix.
- Includes low leakage probe card interface plug.
- Compatible with low leakage probe card.
- Includes HP 16077A extension fixture harness.
- First probe card plug: pin 1 through pin 24 wired to 16077A channel 1 through 24,
- Second probe card plug: pin 1 through pin 24 wired to 16077A channel 25 through 48 (unless customer supplies specific wiring diagram).
- Probe card plug #1 Edge Sense from probe card position 25 to single DB9 (pin 1 and 9).
- Ground lead from probe card position 26 to banana plug.

SQ-114-913-01 — Cable Adapter, 70-Pin Edge Connector to Wiring Harness 108-719

- 6 inch adapter cable with a 70 pin 0.1-inch contact spacing connector on one end, and mating plug to 108-719 on the other.
- Wiring viewed from top side, with the probe card opening pointing away from user.
- Top row connectors in 70 pin edge connector have pin 2 on left, pin 70 on right.
- Bottom row is pin 1 to pin 69.
- Pins 12 - 23 connect to harness plug 1 - 12.
- Pins 47 - 58 connect to harness plug 13 - 24.

SQ-116-477-01 — Harness, Coax, 48-Line, 72-Inch Adapter, 48-Pin Edge Connector

- Custom cable harness.
- Edge 1 to 24 wired to channel 1 to channel 24,
- Edge A to AB wired to channel 25 to channel 48.

SQ-116-477-03 — Harness, Coax, 48-Line, 96-Inch, Edge Connector, Standard Triax

- Nominal 96 inch custom cable harness has 48 channels connected to a 48 pin edge connector on one end and standard triax connector on the other.
- Triax cable guard and shield are open at the edge connector with the center conductor being the only connection.
- Harness similar to SQ-116-477-01 (Edge 1-24 wired to channel 1 to channel 24, Edge A to AB wired to channels 25-48).
- Customer must furnish connection table for the 48-line positions on the edge connector.

SQ-116-477-04 — Harness, Coax, 36-Line, 1M, Edge Connector -STD Triax

- Nominal 39.4 inch (1 m) custom cable harness has 36 channels connected to a 48 pin edge connector on one end and to a standard triax connector on the other.
- Triax cable guard and shield are open at the edge connector with the center conductor being the only connection.
- Harness similar to SQ-116-477-01 (Edge 1-24 wired to Channel 1 to Channel 24, Edge A to N wired to channel 25 to channel 36).
- Customer must furnish connection table for the 36-line positions on the edge connector.

SQ-117-320-01 — Harness, Triax Cable, 24-Line, 2M, Triax Connector End

- Cable looks like the triax connector end of 108-719 harness (2 m (6.5 ft) and Edge Sense with other end of triax un-terminated.
- Channel labels are on unterminated end.

SQ-108-719-03 — Harness, Triax Cable, 24-Line, 3M, for Probe Card

- 3 m ±1 cm version of 108-719 low noise harness.

High Voltage

SQ-114-643-05 — Triax Connection Panel, HV, Large Area Bridge, 11/12K SVA

- Triax panel compatible with a large area bridge on a Summit 11/12K station
- 4 HV triax feedthroughs instead of the normal triax feedthroughs

SQ-120-416-02 — High Voltage Option, Keithley, HV DCP-HTR

- Connection path from a Keithley test instrument to a special HV DCP-HTR probe on a Summit 11/12K with MicroChamber.
- HV cable from Keithley test instrument to triax panel
- Cable from triax panel to triax adapter
- HV triax to coax adapter
- Left DCM positioner
- HV DCP-HTR probe

SQ-120-416-03 — High Voltage Option, Keithley, HV DCP-HTR

- Connection path from a Keithley test instrument to a special HV DCP-HTR probe on a Summit 11/12K station with MicroChamber.
- HV cable from Keithley test instrument to triax panel
- Cable from triax panel to triax adapter
- HV triax to coax adapter
- Right version DCM positioner
- HV DCP-HTR probe

SQ-131-536-01 — Kit, Low Voltage Triax to High Voltage Triax

- Kit allows high voltage to be applied to the chuck surface.

SQ-131-536-02 — Kit, Triax, High Voltage, Banana

- Kit allows high voltage from a banana plug interface to be applied to the chuck's service loop connections at the back of a custom Summit station.
- Further description will be added as design progresses.

SQ-S12752B-6-01 — Semiauto Probe Station, 6-Inch, Femto-GT, AU, Alternate Service Loop

- Custom 12752B-6 station built with an alternate source for the triax cable in the service loop in order to support a specific application.

Waveguide

SQ-129-009-02 — Waveguide, WR10-110 GHz, E-Bend, S-Shaped, Custom

- Custom-shaped 110 GHz (WR10) waveguide made of Beryllium copper.
- Coated with 40 micro-inches of gold.
- Guide is annealed at the bends subsequent to flange brazing to allow for a very small amount of flexing (to enable probe planarization).
- Shape of this guide was made specifically for NASA's 12K station using ACP110M probes with Oleson VNA Frequency Extension modules on SQ-113-120-09 and SQ-113-130-09 positioners.

SQ-129-009-03 — Waveguide, WR6-170 GHz, E-Bend, S-Shaped

- Custom-shaped 170 GHz (WR6) waveguide made of Beryllium copper.
- Coated with 40 micro-inches of gold.
- Guide is annealed at the bends subsequent to flange brazing to allow for a very small amount of flexing (to enable probe planarization).

Custom Probes

ACP

Bridged ACP

SP-ACP40-GG-02 — ACP Probe, GG, 500 µm

- Custom ACP body-style 500 µm pitch probe, with tip bridged to create a GG-500 configuration.

SP-ACP40-GGG-03 — ACP Probe, GGG, 200 µm

- Standard ACP40-GSG-200 with tip bridged to create GGG-200 configuration.

SP-ACP40-GGG-04 — ACP Probe, GGG, 350 µm

- Standard ACP40-GSG-350 with tip bridged to create GGG-350 configuration.

SP-ACP40-GGG-05 — ACP Probe, GGG, 300 µm

- Standard ACP40-GSG-300 with tip bridged to create GGG-300 configuration.

SP-ACP40-GGG-07 — ACP Probe, GGG, 150 µm

- Standard ACP40-GSG-150 with tip bridged to create GGG-150 configuration.

SP-ACP40-GGG-08 — ACP Probe, GGG, 400 µm

- Standard ACP40-GSG-400 with tip bridged to create GGG-400 configuration.

SP-ACP-GG-150-1 — ACP Probe, GG, 150

- ACP40-GS-150 with the solder bridging the shelf to create a ground-ground-150 configuration.

Two-Hole ACP

SP-ACP40-GS-150-T — ACP Probe, 40 GHz, GS, 150 Au, Two-Hole Block

- ACP40-GS-150 probe with a two-hole mounting block instead of the standard three-hole mounting block.
- Model 18 or 19 pico probe tip
- GGB
- P/N 18B-4-20
- 1.0 µm tip diameter.

SP-ACP40-GSG-150-T — ACP Probe, 40 GHz, GSG, 150 Au, Two-Hole Block

- ACP40-GSG-150 probe with a two-hole mounting block instead of the standard three-hole mounting block.

SP-ACP40-GSG-200-T — ACP Probe, 40 GHz, GSG, 200 Au, Two-Hole Block

- ACP40-GSG-200 probe with a two-hole mounting block instead of the standard three-hole mounting block.

SP-ACP40-GSG-250-T — ACP Probe, 40 GHz, GSG, 250 Au, Two-Hole Block

- ACP40-GSG-250 probe with a two-hole mounting block instead of the standard three-hole mounting block.

SP-ACP40-SG-150-T — ACP Probe, 40 GHz, SG, 150 Au, Two-Hole Block

- ACP40-SG-150 probe with a two-hole mounting block instead of the standard three-hole mounting block.

SP-ACP50-GSG-200-T — ACP Probe, 50 GHz, GSG, 200 µm, Au, Two-Hole Block

- ACP50-GSG-200 probe with a two-hole mounting block instead of the standard three-hole mounting block.

ACP RC Tips

SP-ACP110-150-RC — ACP Probe, 110 GHz, 150, GSG, Small Pad

- Reduced contact area probe tip version of ACP110-GSG-150.
- Relaxed electrical specifications apply.

SP-ACP110-A-150-RC — ACP Probe, 110 GHz, GSG, 150, Angle Connector, Small Pad

- Reduced contact area probe tip version of ACP110-A-GSG-150.
- Relaxed electrical specifications apply.
- Not recommended due to reduced performance.

SP-ACP110-C-125-RC — Probe ACP, 110 GHz, GSG, 125, Coax, Small Pad

- Reduced contact area probe tip. Uses 111-903 tip.
- Relaxed electrical test specs.
- Label SP-RC.
- Not recommended due to reduced performance.

SP-ACP110-C-150-RC — ACP Probe, 110 GHz,150, GSG,Coax, Small Pad

- Reduced contact area probe tip version of ACP110-C-GSG-150.
- Relaxed electrical specifications apply.
- Not recommended due to reduced performance.

SP-ACP40-GS-150-8 — ACP Probe, 40 GHz, GS, 150, SP Small Pad Probe Tip

- Standard ACP40-GS-150 built with the reduced contact area tip (111-904 GSG with finger removed).
- Relaxed ACP40 specifications apply.

SP-ACP40-GSG-100-W — ACP Probe, 40 GHz, GSG, 100,W, SP Small Pad Probe Tip

- Reduced contact area tungsten GSG-100 probe.
- Relaxed ACP40 specifications apply.
- C40-W-GSG-100

SP-ACP40-GSG-250-6 — ACP Probe, 40 GHz, GSG, 250, SP BeCu, Small Contact Tip

- Standard ACP40-GSG-250 built with the reduced contact area tip.

SP-ACP40L-GSG-50-3 — ACP Probe, 40 GHz, GSGL, 50 µm, Low-Loss, Stainless Steel Tip

- ACP40-L with a reduced contact stainless steel tip.
- Relaxed test specs.
  - S11/S22 15dB to 20Ghz
  - 10dB to 40Ghz S21 -1dB to 40Ghz

SP-ACP40-LW-100-01 — ACP Probe, 40 GHz, GSG, 100 µm, W, Low Loss

- 40 GHz low loss probe with a reduced contact tungsten GSG 100 µm pitch tip on a best-effort basis.

SP-ACP40-LW-125-04 — ACP Probe, 40 GHz, GSG, 125 µm, W, Low Loss

- 40 GHz low loss probe with a reduced contact tungsten GSG 125 µm pitch tip.

SP-ACP40-W-GS-100R — ACP Probe, 40 GHz, W, GS, 100, Small Pad Probe Tip

- Standard ACP40-W-GS-100 built with a reduced contact GS/SG tip.

SP-ACP40-W-GS-150R — ACP Probe, 40 GHz, W, GS, 150, Small Pad Probe Tip

- Standard ACP40-W-GS-150 built with the reduced contact area W GSG tip (111-912).
- Relaxed ACP40 specifications apply.
- Label SP-RC.

SP-ACP40-W-GS-90R — ACP Probe, 40 GHz, W, GS, 90, Small Pad Probe Tip

- Custom version of the ACP40-W-GS probe at 90 µm pitch using a reduced contact area tip.

SP-ACP40-W-SG-150R — ACP Probe, 40 GHz, W, SG, 150, Small Pad Probe Tip

- Standard ACP40-W-SG-150 built with the reduced contact area W GSG tip (111-912).
- Relaxed ACP40 specifications apply.
- Label SP-RC.

SP-ACP40-W-SG-90R — ACP Probe, 40 GHz, SG, 90,Tungsten, Small Pad

- Custom version of the ACP40-W-SG probe at 90 µm pitch using a reduced contact area tip.

SP-ACP65-L-100-01 — ACP Probe, 65 GHz, GSG, 100, BeCu, Low Loss, 1.85 mm

- ACP65-L-GSG-100 with a reduced contact BeCu tip.

SP-ACP40-W-SG-100R — ACP Probe, 40,W, SG, 100,Small Pad Probe Tip

- Standard ACP40-W-SG-100 built with a reduced contact GS/SG tip.

Shielded ACP

SP-ACP40-GSG-100-S — ACP Probe, 40 GHz, Shielded, GSG100

- ACP40-GSG-100 built with a special shielded tip and is similar to an old version of the ACP50/65 probes.

SP-ACP40-GSG-125-S — ACP Probe, 40 GHz, Shielded, GSG125

- ACP40 GSG 125 probe with shielded tip.
- Standard ACP40 specifications.
- This probe has the same shielded tip as ACP50 probes were once made.

SP-ACP40-GSG-150-S — ACP Probe, 40 GHz, Shielded, GSG150

- ACP40 GSG 150 probe with shielded tip.
- This probe has the shield (107-196) and tip (108-802), K connector, tested as ACP40.

SP-ACP40-GSG-250-S — ACP Probe, 40 GHz, Shielded, GSG250

- Special ACP40-GSG-250 with shielded tip.

SP-ACP40L-GSG-150S — ACP Probe, 40 GHz, Shielded, GSG, 150,Ultra Low Loss

- ACP40-L-GSG-150 with shield.

SP-ACP50-GSG-150-S — ACP Probe, 50, Shielded, GSG150

- ACP50 GSG 150 probe with shielded tip.

SP-ACP65-GSG-250-S — ACP Probe, 65, Shielded, GSG250

- Special ACP65-GSG-250 with shielded tip.

ACP Signal Only

SP-ACP40-A-XSX-01 — ACP40 Probe, XSX, Angle Connector

- Standard ACP40-a style probe built with a signal finger attached at the tip. (Tip material is BeCu.)
- This configuration is intended for a special application, built on a best-effort basis with minimal testing.
- Not suitable for RF probing because no ground connection is present at the tip.

SP-ACP40-XSX-01 — ACP Probe, 40 GHz, XSX

- Standard ACP40 style probe built with a signal finger attached.
- Choice of tip material is BeCu, tungsten, or stainless steel.
- This configuration is intended for a special application, built on a best-effort basis with minimal testing.
- Not suitable for RF probing because no ground finger is present.

SP-ACP40-XSX-02 — ACP Probe, 40 GHz, XSX, 45 Degree Bend

- Standard ACP40 style probe built with a custom coax/tip angle and with a signal finger attached.
- Choice of tip material is BeCu, tungsten, or stainless steel.
- This configuration is intended for a special application, built with a nominal 45 degree coax and tip angle, on a best-effort basis with minimal testing.
- Not suitable for RF probing because no ground finger is present.

SP-I40-A-XSX-01 — Infinity Probe, 40 GHXSX, Angle Connector

- Standard I40-A style probe built with a signal connection attached at the tip.
- This configuration is intended for a special application, built on a best-effort basis with minimal testing.
- Not suitable for RF probing because no ground finger is present at the tip.

Cryo ACP

SP-ACP40-GSG-100-C — ACP Probe, 40 GHz, GSG, 100, Cryo, 0.047 Coax, Stainless Steel Tip

- This GSG-100 probe is designed for use in Cryogenic measurements.
- Matched materials are used on the coax inner and outer conductors and the tip material is stainless steel.

SP-ACP40-GSG-125-C — ACP Probe, 40 GHz, GSG, 125, Cryo, 0.047 Coax, Stainless Steel Tip

- This GSG-125 probe is designed for use in Cryogenic measurements.
- Matched materials are used on the coax inner and outer conductors and the tip material is stainless steel.

SP-ACP40-GSG-150-C — ACP Probe, 40 GHz, GSG, 150,Cryo, 0.047 Coax, Stainless Steel Tip

- This GSG-150 probe is designed for use in Cryogenic measurements.
- Matched materials are used on the coax inner and outer conductors and the tip material is stainless steel.

SP-ACP40-L-150-3 — ACP Probe, 40 GHz, GSG, 150 ST-ST,Low-Loss

- ACP40-L-GSG-150 probe with a special stainless steel tip instead of the standard BeCu tip.

SP-ACP50-GSG-150-3 — ACP Probe, 50GHz, GSG, 150, Stainless Steel Tip

- ACP50-GSG-150 probe with a special stainless steel tip instead of the standard BeCu tip.
- Standard ACP50 specifications apply.

SP-ACP50-GSG-250-C — ACP Probe, 50 GHz, GSG, 250, Cryo, 0.047 Coax, SS Tip

- This ACP50 GSG configuration probe, 250 µm pitch, is designed for use in Cryogenic measurements.

SP-ACP50-GSG-100-C — ACP Probe, 50 GHz, GSG, 100, Cryo, 0.047 Coax, Stainless Steel Tip

- This GSG-100 probe is designed for use in Cryogenic measurements.
- Matched materials are used on the coax inner and outer conductors and the tip material is stainless steel.

SP-ACP50-GSG-150-C — ACP Probe, 50 GHz, GSG, 150, Cryo, 0.047 Coax, Stainless Steel Tip

- This GSG-150 probe is designed for use in Cryogenic measurements.
- Matched materials are used on the coax inner and outer conductors and the tip material is stainless steel.

ACP 047

SP-ACP40-1500-01 — ACP Probe, 40 GHz, GSG, 1500 µm, BeCu

- ACP body-style GSG probe at 1500 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip.

SP-ACP40-1500-02 — ACP Probe, 40 GHz, GS, 1500 µm, BeCu

- ACP body-style GS probe at 1500 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu tip.

SP-ACP40-1500-03 — ACP Probe, 40 GHz, SG, 1500 µm, BeCu

- ACP body-style SG probe at 1500 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu tip.

SP-ACP40-1800-01 — ACP Probe, 40 GHz, GS, 1800 µm

- ACP body-style GS probe at 1800 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip minus one ground contact finger.

SP-ACP40-1800-02 — ACP Probe, 40 GHz, SG, 1800 µm

- ACP body-style SG probe at 1800 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip minus one ground contact finger.

SP-ACP40-2000-01 — ACP Probe, 40 GHz, GSG, 2000 µm, BeCu

- ACP body-style GSG probe at 2000 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip.

SP-ACP40-2000-02 — ACP Probe, 40 GHz, GS, 2000 µm, BeCu

- ACP body-style GS probe at 2000 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip.

SP-ACP40-2000-03 — ACP Probe, 40 GHz, SG, 2000 µm, BeCu

- ACP body-style SG probe at 2000 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip.

SP-ACP40-2500-02 — ACP Probe, 40 GHz, GS, 2500 µm, BeCu

- ACP body-style GS probe at 2500 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip.

SP-ACP40-3000-01 — ACP Probe, 40 GHz, GS, 3000 µm, Tungsten

- ACP body-style tungsten-tipped GS probe at 3000 µm pitch, built using 2.92 mm connector, 0.047" coax and ACP body, with standard FPC tungsten tip.

SP-ACP40-450-01 — ACP Probe, 40 GHz, GSG, Low Loss 0.047" Coax

- Low Loss ACP body-style GSG probe at 450 µm pitch, built using 2.92 mm connector, 0.047" coax and Low Loss ACP body, with standard FPC BeCu GSG tip.

SP-ACP40-2500-03 — ACP Probe, 40 GHz, SG, 2500 µm, BeCu

- ACP body-style SG probe at 2500 µm pitch, built using 2.92mm connector, 0.047" coax and ACP body, with standard FPC BeCu GSG tip.

MISCELLANEOUS CUSTOM ACP

ACP Non-Wafer **SP-ACP40-450-02** Low Loss ACP, 40 GHz, GSG, 0.047" Coax, Robust Tip	• Low Loss ACP body-style GSG probe at 450 µm pitch, built using 2.92mm connector, 0.047" coax and Low Loss ACP body. • Mechanically optimized FPC BeCu GSG tip will prevent the grounds from contacting a wide signal pad during use.
ACP Kelvin **SP-KELVIN-02** Compact Format, 8-Contact Kelvin Probe	• Compact format, 8 contact Kelvin probe using an ACP style tip attached to a PCB and terminated with extra fine lead wires.
ACP50 Low Loss **SP-ACP40-L-150-1** ACP, 50 GHz, GSG, 150 Au, Low Loss, 2.4 mm	• ACP40-L-GSG-150 probe with a 2.4 mm connector. • Label SP-1.
ACP Term **SP-ACP-TERM-50 OHM** 50 Ohm Termination Resistor, ACP, Shelf	• 50 Ohm termination resistor to ground on the shelf of an ACP or ACP-D probe to create a best-effort 50 Ohm terminated contact. • Probe must be included on the same order with a note indicating configuration with the terminated signal denoted by a T (GTG, GTSG, etc).
ACP Long Tip **SP-ACP40-W-SG-900A** ACP Probe, SG, 900, Longer Tip, for Al Pads	• Standard ACP40-W-SG-900 probe in which the total tip length is 500 µm.
ACP GG **SP-ACP-GG-400-1** ACP Probe,GG, 400	• ACP40-GSG-200 with the center finger left off to create a ground-ground-400 configuration.
ACP-R **SP-ACP-RW-GSG100-1** ACP Probe, Resistor, GSG, 100, Tungsten, 1000 Ohm	• Special version of the ACP-R-GSG-100 probe in which the required resistor value, 1000 ohms, is outside the standard range (10-300 ohms) and a tungsten tip is used. • RF performance is on a best-effort basis.
ACP-R **SP-ACP-RW-SG-100-1** ACP Probe, Resistor, SG, 100, Tungsten, 1000 Ohm	• Special version of the ACP-R-SG-100 probe in which the required resistor value, 1000 ohms, is outside the standard range (10-300 ohms) and a tungsten tip is used. • RF performance is on a best-effort basis.
ACP Non-Standard **SP-ACP40-GS-300-2** ACP Probe, 40 GHz, GS, 300, Longer Tip	• ACP40-GS-300 probe with non-standard tip profile. • Tip fingers are cut, ground and lapped to gain at least 25 µm in length. • Electrical performance to be on a best-effort basis. • Reduced ACP specifications apply.
ACP Non-Standard **SP-ACP40-GS-500-1** ACP Probe, 40 GHz, GS, 500, Longer Tip	• ACP40-GS-500 probe with non-standard tip profile. • Tip fingers are cut, ground and lapped to gain at least 25 µm in length. • Electrical performance to be on a best-effort basis. • Reduced ACP specifications apply.
ACP Dual **SP-ACP40-D-100-10** ACP Probe, Dual, SGG, 100, Tungsten	• Custom ACP40 Dual probe built to achieve a SGG configuration at 100 µm pitch. • Build with standard ACP40 Dual body and tungsten 100 µm GSGSG tip with outer ground fingers removed and right-most SG fingers bridged in order to support the required SGG pad layout. • Left connector is a 2.92 mm; right connector location to be filled with a SMA plug.
ACP Dual **SP-ACP40-D-SGGS-1** ACP Probe, Dual, SGGS, BeCu 700 SS,150 Standard	• ACP40-D probe with S-150-G-400-G-150-S configuration (150 µm standard pitch, 700 µm signal pitch).
ACP Narrow Pitch **SP-ACP65-75-01** ACP Probe, 65 GHz, GSG, 75	• ACP65-GSG-75 built on a best-effort basis.
ACP-Z **SP-ACP40-Z-18** ACP 40GHz Probe, 10 Ohm, 125 µm, Angle, Best Effort	• Custom ACP-Z impedance match probe with a 2.4 mm connector on an 45° angled connector body • Tip configuration is GSG 125 µm pitch, non-standard tip impedance match of 10 ohms, with a standard <10% bandwidth around a center frequency of 40 GHz. • Performance to be on a best-effort basis.

FPC

FPC 2.4 mm

SP-FPC-GSG-250-01 — FPC Probe, GSG, 250, Au, 2.4 mm Connector

- FPC-GSG-250 probe with a 2.4 mm connector instead of the standard K connector.
- Standard FPC test specifications apply.
- Label SP-1.

FPC-R Custom

SP-FPC-R-SG-175-01 — FPC Probe, Resistor, SG, 175, 450 Ohms

- Special version of a FPC-R-SG-175 probe in which the required resistor value, 450 ohms, is outside the standard range (10-300 ohms).
- RF performance is on a best-effort basis.

SP-FPC-R-SG-750-01 — FPC Probe, Resistor, SG, 750, 450 Ohms

- Special version of the FPC-R-SG-750 probe in which the required resistor value, 450 ohms, is outside the standard range (10-300 ohms).
- RF performance is on a best-effort basis.

FPC RC

SP-FPC-GS-1-RC — FPC Probe, GS, 1000, BeCu, Small Pad

- Custom version of the FPC-GS-1000 probe with a reduced contact area tip.

SP-FPC-GS-100-RC — FPC Probe, GS, 100, BeCu, Small Pad

- Custom version of the FPC-GS-100 probe with a reduced contact area tip.

SP-FPC-GS-300-RC — FPC Probe, GS, 300, BeCu, Small Pad

- Custom version of the FPC-GS-300 probe with a reduced contact area tip.

SP-FPC-GS-500-RC — FPC Probe, GS, 500, BeCu, Small Pad

- Custom version of the FPC-GS-500 probe with a reduced contact area tip.

SP-FPC-SG-1000-RC — FPC Probe, SG, 1000, BeCu, Small Pad

- Custom version of the FPC-SG-1000 probe with a reduced contact area tip.

SP-FPC-SG-100-RC — FPC Probe, SG, 100, BeCu, Small Pad

- Custom version of the FPC-SG-100 probe with a reduced contact area tip.

SP-FPC-SG-200-RC — FPC Probe, SG, 200, BeCu, Small Pad

- Custom version of the FPC-SG-200 probe with a reduced contact area tip.

SP-FPC-SG-3000-RC — FPC Probe, SG, 3000, BeCu, Small Pad

- Custom version of the FPC-SG-3000 probe with a reduced contact area tip.

SP-FPC-SG-300-RC — FPC Probe, SG, 300, BeCu, Small Pad

- Custom version of the FPC-SG-300 probe with a reduced contact area tip.

SP-FPC-SG-500-RC — FPC Probe, SG, 500, BeCu, Small Pad

- Custom version of the FPC-SG-500 probe with a reduced contact area tip.

FPC TERM

SP-FPC-R-150-01 — FPC Probe, Resistor, GSG, 150, 50 Ohm Shunt

- FPC-R-GSG-150 probe with two 100 ohm resistors shunted in parallel yielding an equivalent 50 ohm termination.
- RF performance will be on a best-effort basis.

Quadrant

SP-DCQ-ESENSE — Edge Sense Switch for DCQ or ACP-Q Probe

- An edge-sense switch to an ACP-Q or DCQ quadrant probe.
- Touchdown location must be specified in quadrant probe order form.
- An isolated switch is available upon request.

RF Modulator Probe

SP-ACP110-Q-10-01 — ACP Probe, 110 GHz, Left Hand Quadrant, 1RF, 0DC

- Left hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP110-Q-10-02, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP110 standard pitch tip on order form.

SP-ACP110-Q-10-02 — ACP Probe, 110 GHz, Right Hand Quadrant, 1RF, 0DC

- Right hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP110-Q-10-01, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP110 standard pitch tip on order form.

SP-ACP40-Q-10-01 — ACP Probe, 40 GHz, Left Hand Quadrant, 1RF, 0DC

- Left hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP40-Q-10-02, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP40 standard pitch tip on order form.

SP-ACP40-Q-10-02 — ACP Probe, 40 GHz, Right Hand Quadrant, 1RF,0DC

- Right hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP40-Q-10-02, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP40 standard pitch tip on order form.

SP-ACP50-Q-10-02 — ACP Probe, 50 GHz, Right Hand Quadrant, 1RF, 0DC

- Right hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP50-Q-10-01, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP50 standard pitch tip on order form.

Other Probes

Board Probes

SP-ACP40-1000-02 — ACP Probe, 2.4 mm Connector, GSG, 1000, XClear Tip

- ACP body-style GSG probe, with a 2.4 mm connector, at 1000 µm pitch.
- Custom mechanically-optimized probe tip that will prevent the grounds from contacting the standard when slight over-travel is applied.

DCP-HTR Blades

SP-109-946-05 — Probe Points, DCP-HTR, Box of 10, 0.350 Inch Beam Length

- Ceramic blade needle assembly, box of 10, for use with DCP-HTR probe assembly.
- Beam length increased to 0.350 inch.

Eng Probe

SP-I40-A-GSG-150HC — Infinity Probe, 40 GHGSG, 150 Angle Connector, High Current

- High current version of the I40-A-GSG-150, rated to 2A.

High Current

SP-I40-A-GSG-100HC — Infinity Probe, 40 GHGSG, 100 Angle Connector, High Current

- High current version of the I40-A-GSG-100, rated to 2A.

SP-I50-GSG-100HC — Infinity Probe, 50, GSG, 100 Vertical Connector, High Current

- Higher current version of the I50-GSG-100 probe.

Power ByPass

SP-ACP-BYPASS — CAP, ACP, Bypass, Shelf, 150 pF

- Adds a 150 pF bypass capacitor to ground on the shelf of an ACP or ACP-D probe to create a power contact.
- Probe must be included on the same order with a note indicating the configuration (GPG, GPSG, etc).

SP-ACP-HP- BYPASS — ACP, Bypass, High Performance

- Adds a high performance power bypass structure on the shelf of an ACP or ACP-D probe to create a power contact.
- Probe must be included on the same order with a note indicating the configuration (GPG, GPSG, etc).

WPH

SP-WPH-909-DEEP — Probe Head, Multineedle, 9 Needles, Deep Reach

- WPH-909 standard or NS probe, but using a deeper reach (~0.100 inch) needle. *
- Customer must define pitch.

Probe Card Frame

SP-107-064-03 — Customer-Supplied Probe Card, 2 DCQ

- This custom product is used to facilitate the mounting and alignment of a pair of DCQs to a customer-supplied frame.
- Field replacment of DCQ probes will not be possible.
- Repairs or realignment require the assembly to be returned to Cascade Microtech.
- All orders require line items indicating the DCQ probes to be used and SP-DCQ-Connector to cover nonstandard cabling requirements.
- First time order will require NRE charge for fixture to adapt customer-supplied frame to alignment equipment.

SP-107-064-04 — Probe Card Frame, 2 ACP/HPC, SP Round Board

- Custom probe card frame based on a customer-supplied round probe card modified to include brackets for mounting two ACP/HPC probes.
- Intended application is for 80x80 µm pads with two GSG-100 probes.
- GSG patterns are separated 220 µm (center to center).
- To complete the probe card, additional order line items are required: 2x HPC40-W-GSG-100, 2x ALIGNMENT

SP-107-064-02 — Probe Card Frame, 2 ACP/HPC, SP Round Board

- Custom probe card frame based on a customer-supplied round probe card modified to include brackets for mounting two ACP/HPC probes.
- Intended application is for 80x80 µm pads with two GSG-150 patterns similar to normal ISS probing.
- GSG patterns are separated 200 µm (center to center).
- To complete the probe card, additional order line items are required: 2x HPC40-GSG-150, 2x ALIGNMENT

SONET Group

SP-ACP110PGSGSGP-2 — ACP Probe, 110 GHz, Quad, S-1.00 mm, P-2.92 mm Connector

- ACP style probe with PGSGSGP-150 tip configuration and a 45 degree angle probe body.
- S connections have 1.00 mm connectors.
- P connections use 2.92 mm (K) connectors and have both 150 pF at the tip and an additional 10kpF along the coax shelf.
- Probe performance will be on a best-effort basis.
- Tasks required to produce next order(s) are recorded on '110GHz NTT Probe Subsequent Order Action Items.doc' located in the Part Number folder.
- The non-recurring engineering charge SP-ACP110-Q-NRE-1 must be ordered the first time this probe is ordered.

SP-ACP40-GPPGPPG-1 — ACP Probe, GPPGPPG,150 4XK-Connector

- ACP style probe with 4 K connectors but in a GPPGPPG-150 tip configuration.
- P connections have both 150 pF at the coax end and an additional 10kpF along the coax shelf.

SP-ACP40-PGSGP-2 — ACP Probe, 4X.031, 3K Connectors, PGSGP, 100 µm

- ACP Quadrant-style probe with 3 K connectors and a PGSGP-100 tip configuration.
- Attempted on a best-effort based on the 100 µm pitch 40 Gb/s Quadrant probe body probe.
- Leaves off the two left-most tips and the left-most connector, and moves the bypass structure to the new left-most tip pair.

SP-ACP40-PGSGSGP-3 — ACP Probe, 40 GHz, 4X.031, 4K Connectors, 100 µm

- ACP style probe with 4 K connectors and a PGSGSGP-100 tip configuration.
- P connections have both a 150 pF cap at the tip and an additional RC along the coax shelf.

SP-ACP40-PGSGSGP-4 — ACP Probe, 40 GHz, 4X.031, Tungsten, 4K Connectors, 100 µm

- ACP style probe with 4 K connectors and a tungsten PGSGSGP-100 tip configuration.
- P connections have both a 150 pF cap at the tip and an additional RC along the coax shelf.

SP-ACP40-PGSGSGP-5 — ACP Probe, 40 GHz, 4X.031, Tungsten, 4K Connectors, 150 µm

- ACP style probe with 4 K connectors and a tungsten PGSGSGP-150 tip configuration.
- P connections have both a 150 pF cap at the tip and an additional RC along the coax shelf.

SP-ACP40-SGSGSG-1 — ACP Probe, 40 GHz, 4X.031, 3K Connectors, 150 µm

- ACP Quadrant style probe with 3 K connectors and a SGSGSG-150 tip configuration.
- Attempted on a best-effort, based on the 40 Gb/s Quadrant probe body probe.
- Leaves off the left-most bypass structure, the right-most bypass structure *and* power tip, and the right-most connector.
- The resulting left-most signal line will be performance limited.

SP-ACP65-PGSGSGP-2 — ACP Probe, 65 GHz, Quad, Small Pad S-1.85 mm, P-2.92 mm

- ACP style probe with a PGSGSGP-150 reduced-contact tip configuration.
- S connections have 1.85 mm (V) connectors.
- P connections use 2.92 mm (K) connectors and have both 150 pF at the tip and an additional 10kpF along the coax shelf.

SP-ACP65-PGSGSGP-3 — ACP Probe, 65 GHz, Quad, 100 µm, S-1.85 mm, P-2.92 mm

- ACP style probe with a PGSGSGP-100 standard-area-contact tip configuration.
- S connections have 1.85 mm (V) connectors.
- P connections use 2.92 mm (K) connectors and have 150pF at the tip and a second shelf with additional components, a 10nF cap, and a 2.7 ohm resistor.

SP-ACP65-Q-10-01 — ACP Probe, 65 GHz, Left Hand Quadrant, 1RF, 0DC

- Left hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP65-Q-10-02, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP110 standard pitch tip on order form.

SP-ACP65-Q-10-02 — ACP Probe, 65 GHz, Right Hand Quadrant, 1RF, 0DC

- Right hand probe uses an RF probe body from the quadrant line mounted on a custom bracket.
- When used with MPH style positioners and the complimentary SP-ACP65-Q-10-01, it allows two independently adjustable RF lines to approach a DUT from the same side.
- Not compatible with TopHat solution and is marginally compatible with probes approaching the DUT from other directions.
- Must specify an ACP65 standard pitch tip on order form.

SP-ACP-PGPGPGP-150 — ACP Probe, PGPGPGP, 150, 4XK-Connector

- ACP style probe with 4 K connectors and a PGPGPGP-150 tip configuration.
- P connections have both 150 pF at the tip and an additional 10kpF along the coax.

SP-ACP40-GSSGSSG-2 — ACP Probe, GSSGSSG, 100, 4X K-Connector

- ACP style 4-coax probe with 4 K connectors.
- Probe is in a GSSGSSG configuration with 100 µm tip spacing.
- RF performance is on a best-effort basis.

SP-ACP40-GSSGSSG-3 — ACP Probe, GSSGSSG, 150, 4X K-Connector

- ACP style 4-coax probe with 4 K connectors.
- Probe is in a GSSGSSG configuration with 150 µm tip spacing.
- RF performance is on a best-effort basis.

SP-ACP40-PGSGSGP-1 — ACP Probe, 40 GHz, 4X.031, 4K Connectors

- ACP style probe with 4 K connectors and a PGSGSGP-150 tip configuration.
- P connections have both 150 pF at the tip and an additional 10kpF along the coax shelf.

SP-ACP40-SGSGSGS-1 — ACP Probe, 4 RF, 4X.031, 4K Connectors, 150 µm

- ACP style probe with 4 K connectors and a SGSGSGS-150 tip configuration.
- Outside signal bandwidth is very limited.

SP-ACP40-SGSGSGS-2 — ACP Probe, 4 RF, 4X.031, 4K Connectors, 100 µm

- ACP style probe with 4 K connectors and a SGSGSGS-100 standard-area-contact tip configuration.
- Outside signal bandwidth is very limited.

SP-ACP65-PGSGSGP-1 — ACP Probe, 65GHz, Quad S-1.85 mm,P-2.92 mm Connector

- ACP style probe with a PGSGSGP-150 tip configuration.
- S connections have 1.85 mm (V) connectors.
- P connections use 2.92 mm (K) connectors and have both 150 pF at the tip and an additional 10kpF along the coax shelf.

SP-ACP65-PGSGSGP-4 — ACP Probe, 65 GHz, Quad, S-1.85 mm,P-2.92 mm, Tungsten

- ACP style probe with a tungsten PGSGSGP-150 tip configuration.
- S connections have 1.85mm (V) connectors.
  - P connections use 2.92 mm (K) connectors and both have a 150 pF cap at the tip and an additional 10kpF cap along the coax shelf.

DC Probe Tips

SP-DCP-A-240 — Probe Point, 24 µm, Coax, for DCP1XXR, Box of 10

- Box of 10 replaceable probe tips, 24 µm radius, for a DCP-1xxR style probe.

SQ-PE5-32-01 — Triax Probe for MD Positioners

- Triaxial probe for MD positioners.
- For use on R48/55/61.
- Includes the PE5.
- Does not include the MD positioner.
- See SQ-115-283-01 for arm assembly to be used with R32/41/43/45

SQ-PTBC-120/4-50 — Needle, BeCu,12U,45 Degree

- Beryllium copper version of the PTT-120/4 tip.
- 2 boxes of 25 each for a total of 50 tips.

SQ-PTT-250/4-25-BC — Needle, BeCu, 45° Bend, 25u, 2 Boxes of 25

- Beryllium copper version of the PTT-250/4-25.
- Minimum order quantity includes 50 probes (2 boxes).

SQ-107-159-01 — Probe Point, 2 µm Radius, XTaper DCP105R, Box of 10

- Taper length .096-.103 radius 2 µm.

SP-109-946-04 — Probe Tip Replacements, DCP-HTR, Box of 10, BeCu Tip

- Ceramic blade needle assembly.
- Box of 10.
- BeCu needle/tip.
- For use with DCP-HTR probe assembly.

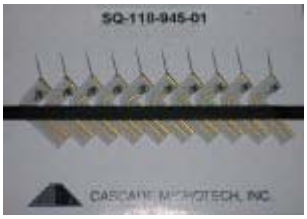
SP-109-946-08 — Probe Points, DCP-HTR, Box of 10, Full Metal

- Blade needle assembly having the same physical shape and dimensions as the blades in 109-946 except these blades have a fully metalized arm and shank.
- For use with DCP-HTR probe assembly.
- Box of 10.

SQ-117-618-01 — Probe Tip, Replaceable, BeCu,1.5 µm, Box of 10

- Replacement probe tips for American Probe body (74CJ-CMIB-KS/15), Cascade P/N SQ-117-619-01.

SQ-118-945-01 — Probe Points, Modified DCP-HTR, AttoGuard, Box of 10



- DCP-HTR blades modified to have one series SMT ferrite component placed in the signal trace.
- Box of 10.

FET Probes

SQ-PEP-18-02 — Pico Probe, Model 18C

- Model 18C pico probe with (1) 10 µm tungsten wire shaft diameter <0.1 µm point diameter tip included (tip GGB part# 18C-1-10).
- Also order SQ-118-701-01 when used with mmP-12/5 pico probe mounts.
- For extra tips, use SQ-110-614-02 (or similar).

SQ-118-708-01 — Pico Probe Mount, DCM Positioner, PS21

- Pico probe mount assembly mounted on a DCM positioner for a PS21 application.

SQ-PEP-28-01 — Pico Probe, Model 28

- Order SQ-118-701-01 when used with MMP-12/5 pico probe mounts.

SQ-108-877-01 — Model 34A GGB Pico Probes

- Does not include power supply.

SQ-109-168-01 — Pico Probe, Model 29

- GGB Industries Model 29 probe.
- Does not include the power supply.

SQ-111-581-01 — RB 133-734 Pico Probe, Model 1

- GGB Industries Model 19 pico probe.
- Uses standard PEP-12 power supply PEP-01.
- Uses pico probe mounts MMP-12 and MMP-12/5.
- Power supply and probe mount not included (order separately).

SQ-108-584-02 — T-4-22 Pico Probe Tip, (P/N T-4-22)

- Pico probe tip.

SQ-135-277-01 — Pico Probe Tip,18C-4-10

- Pico probe tip, with 10 µm shaft diameter and <0.1 µm point diameter, for a Model 18C probe.

GGB Pico ProbeTips

SQ-109-167-01 — Pico Probe Tip, 28-5-10

- GGB Industries #28-5-10 probe tip.

SQ-114-503-01 — Probe Tip Replacement, Pico Probe 12C, 12C-1-10

- Wire size 10 µm, tip size <0.1 µm.
- Minimum order quantity 6 each.

SQ-114-503-02 — Probe Tip, Replacement, Pico Probe 12C, 12C-2-10

- Wire size 10 µm, tip size <0.1 µm.
- Minimum order quantity 6 each.

SQ-114-503-03 — Probe Tip, Replacement, Pico Probe 12C, 12C-1-35

- Wire size 35 µm, tip size <2.0 µm.
- Minimum order quantity 6 each.

SQ-116-465-01 — Probe Tip, Replacement, Pico Probe 12C-1-10-HT

- High temp version wire size 10 µm, tip size <0.1 µm.
- Minimum order quantity 6 each.

SQ-129-659-02 — Probe Tip, Replacement, Model 12C, Custom

- Custom version 12C-1-22 style replacement tip for pico probe Model 12C allowing for an increased usable voltage range of -20V to +40V.
- Use on standard Model 12C's and SQ-116-464-01 probe.
- Input resistance increases to the approximate range of 1.8-2.0 m Ohms.
- Overall probe's attenuation increases to 20:1 with a High Impedance oscilloscope input, and increases to 40:1 with a 50 ohm scope input.
- All other specifications remain as per a standard tip.
- Minimum order quantity 6 each.

SQ-135-279-01 — Pico Probe Tip, 18C-4-20

- Pico probe tip, with 20 µm shaft diameter and <1.0 µm point diameter, for a Model 18C probe.
- Vendor part number 18C-4-20.

RF Accessories

SQ-129-009-05 — Waveguide, WR5-220 GHz, Custom

- Custom shaped WR5 (220 GHz) waveguide. Waveguide provides a very small amount of flexing to allow for probe planarization.
- The shape of this waveguide was specifically made for a 9k station using I220 probes with OML WR5 waveguide heads on SQ-112-960-03 and SQ-112-970-03 positioners.

SQ-123-845-02 — Adapter, 2.4 mm Male, 2.92 mm Male

- Precision adapter with a 2.4 mm male connector on one side and a 2.92 mm (K) male connector on the other.

SQ-118-405-01 — Wrench, Torque, 8LBS 5/16, Agilent

- Torque wrench for 2.92 mm standard RF cable connectors with 5/16 inch hex size.

SQ-129-009-04 — Waveguide, WR8-140 GHz, Custom

- Custom shaped WR8 (140 GHz) waveguide. Waveguide is processed to allow for some very small amount of flexing to allow for probe planarization.
- The shape of this waveguide was specifically done for a 9k station using SP-I140-M-GSG probes with OML WR8 waveguide heads on SQ-112-960-03 and SQ-112-970-03 positioners.

RF Waveguide Probes

SP-I110-GSG-150-1 — Infinity Probe, 110 GHz, GSG,150

- WR-10 waveguide probe with ACP style body.
- Configured with a 150 µm GSG Infinity-style membrane tip.
- Probe does not have a bias circuit.
- Not MicroChamber compatible.

SP-I140-M-GSG-100 — Infinity Probe, 110 GHz, GSG,100, MicroChamber

- WR8 Waveguide Infinity probe with a Bias Tee in a GSG 100 µm pitch configuration, attempted on a best-effort basis.

HF Probe Card Frame

SP-107-064-04 — Probe Card Frame, 2 ACP/HPC SP Round Board

- Special probe card frame based on a customer-supplied round probe card that will be modified to include brackets for mounting two ACP/HPC probes.
- Intended application is for 80x80 µm pads with two GSG-100 probes.
- GSG patterns are separated 220 µm (center to center).
- Additional order line items are required to complete the probe card: 2x HPC40-W-GSG-100, 2x alignment.

SP-107-064-02 — Probe Card Frame, 2 ACP/HPC SP Round Board

- Special probe card frame based on a customer-supplied round probe card that will be modified to include brackets for mounting two ACP/HPC probes.
- Intended application is for 80x80 µm pads with two GSG-150 patterns arranged similar to normal ISS probing.
- GSG patterns are separated 200 µm (center to center).
- Additional order line items are required to complete the probe card: 2x HPC40-GSG-150, 2x alignment.

Multi RF

SP-ACP40-SSGSS-01 — ACP Probe, 4X.031,4K CON, SSGSS, Custom

- ACP style probe with 4 K connectors and a custom 4RF tip configuration, based on the 40 Gb/s probe body.
- RF performance is on a best-effort basis.

SP-ACP40-SSGSS-02 — ACP Probe, 4X.031,4K CON, SSGSS, Custom

- ACP Quadrant style probe with 4 K connectors and a custom 4RF tip configuration, based on the 40 Gb/s Quadrant probe body.
- RF performance is on a best-effort basis.

SP-ACP40-SSSSG-01 — ACP Probe, 4X.031,4K CON, SSSSG, Custom

- ACP style probe with 4 K connectors and a custom 4RF tip in a SSSSG configuration, based on the 40 Gb/s probe body.

SP-ACP50-Q-40-01 — ACP Probe, 50 GHz, Quad, 4RF, 200 Basic, Custom Signal

- Custom ACP50-Q with 4 RFs in a GSG..GSG..GSG..GSG configuration.
- 200 µm basic pitch for the GSG portion.
- 1050 µm..1300 µm..1050 µm spacing between signals.

DC Probe Holders

SP-WPH-903-400-01 — Multineedle Probe Head, Ceramic Blades

- WPH-900 series probe with 3 ceramic blades (similar to DCQ blades) used instead of the normal metallic needles.
- Pitch is 400 µm.

SQ-MMP-01/J-01 — Probe Mount, 1 Inch Shorter, Straight, MH/MS With PHJ/M

- Standard probe mount and Jack Lock probe holder.
- Arm is 1 inch shorter accomplished by having MMP-01-50 shorter.

SP-DCP-247K-25 — Coax Probe Assembly, Kelvin, 25 µm Pitch,5 µm BeCu Tip

- DC coaxial probe with shipping box, Kelvin, 25 µm pitch, 5 µm radius BeCu tip.
- This SP has a nominal 11.7 mil diameter BeCu center conductor/ tip, the OD of the coax is 0.047", the number etched on the side of the probe is "DCP-247-25", and the label on the package reads "SP-DCP-247K-25".

SQ-108-289-03 — Probe Assembly, PE5/32, 5 cm, Articulated Arm, Button Head Screws

- Probe assembly with a 5 cm long probe tip holder on an articulated arm.
- The probe tip is the same as a PE5/32 with a much shorter holder.
- Articulated arm is mounted to a pivot block and all links are held by button head screws.
- Cable assembly is 2 m long.

SQ-108-289-04 — Probe Assembly, PE5/32, 5 cm, Articulated Arm, BNC Connector

- Probe assembly with a 5 cm long probe tip holder on an articulated arm.
- The probe tip is the same as a PE5/32 with a much shorter holder.
- Articulated arm is mounted to a pivot block and uses thumb screw for adjustments.
- Cable assembly is 32 inches long.
- Connector type is a coaxial BNC wired to the triax cable with the guard and shield conductors shorted together and connected to the shield of the BNC connector.

SQ-108-310-02 — DCP Adapter to R41/32 On MH2 Using 105-540 Coax Cable

- DCP probe mount setup for use with a R41 or R32 on a MH2 style positioner. This is the only setup for use with the 105-540 coax cable (BNC to SSMC).

SQ-114-818-09 — Dual Triax Adapter Kit, DCM Positioner, EG2001

- Modified 114-818 style dual triax adapter kit to be used in conjunction with a DCM positioner(not included) on an EG2001 probe station.
- Adapter has been designed with a 12.5 cm reach and a drop down for a 35mm chuck-to-platen separation.

SQ-114-847-01 — Needle Probe Mount, Jack Lock, MDL, S11/12K

- MD series positioner needle probe mount for Summit 11/12K probe stations.
- Use standard PTT probe tips (PTT-XX/4-25).
- Must add MD series positioner as separate item, magnetic base recommended.

SQ-118-408-01 — Adapter, Probe Arm, Custom Drop Down, MMP

- Allows the use of MMP-01 and MMP-12 probe mounts on EG and R&K probe stations.
- Includes mounting hardware.
- Order MH2 positioner and probe mount separately.

SQ-135-273-01 — DCP Adapter, MD Positioner, RF1, Using 105-540

- DCP probe mount setup for use with a MD style positioner on an RF1 station.
- This is the only setup for use with the 105-540 coax cable (BNC to SSMC).
- Use only on magnetic based positioners.

SQ-PE5-02/5-04 — Probe Assembly, 1.5 m Cable,R48,R55,R61

- For R48,55,61 stations.
- Same as PE5-02/5, but cable is 1.5 meters long.

SQ-PE5-11-01 — Coax Probe With 2.0 m Cable, No Mounting Hardware

- PE5-11 with 2.0 m (78.7") cable.
- Does not come with mounting hardware.

SQ-PE5-11-02 — Coax Probe, No Cable or Mounting Hardware

- Coax probe portion of a PE5-02 without the cable and any mounting hardware.

SQ-PE5-32/5-02 — PE5-32/5 Probe With 1 m Cable

- PE5-32/5 probe.

SQ-PE5-32/5-14 — Triax Probe, Stubby Cable No Alligator

- Based on a PE5-32/5, but with a 2" nominal triax cable and no "flying wire to alligator clip."

SQ-PE5-32/5-89 mm — Probe,Triax,50 Ohm, 89 mm Holder, 4 m Cable

- PE5-32/5 with 4 meter (157.5") cable, probe has 89mm (3.5") holder.

SQ-PE5-32/DCM-03 — Probe,PE5-32 for DCM,28" Cable

- PE5-32 probe is used with a DCM positioner on a Summit station.
- Same as a PE5-32, except a special mounting block allows mounting on a DCM positioner.
- Triax cable is 28 inches long.
- Cable measurement is from probe pin jack to triax connector; actual exposed cable is nominal 4" shorter.

SQ-104-030K-03 — Triax Adapter, Kelvin, DCM, R6151-G-Chamber

- DCP probe holder with dual triax adapter for Alessi R48/61 probe stations including MicroChamber systems.
- Compatible with DCM, MS-1, MH5, and magnetic base MH2 positioners.
- Includes lengthened coaxial cable on triax adapter, extended probe mount, and set of spacers to allow probing in SE and SW ports with mounting hardware.
- Does not include triax cables or DCP probes)
- Weight of assembly makes it not compatible with MH2 series vacuum base positioner.

SQ-108-289-01 — Probe Assembly, PE5/32, 5 cm Holder, Articulated Arm

- Probe assembly with a 5 cm long probe tip holder on an articulated arm.
- Probe tip is the same as a PE5/32 with a much shorter holder.
- Articulated arm is mounted to a pivot block and all links are held by thumb screws.
- Cable is 2 m long.

SQ-113-442-03 — Arm, Gravity, Loaded, Mount to MDL Positioner, 12K

- Arm has adjustable maximum down stop and adjustable tension screw.
- Designed to hold 1.25" long PTT .020 diameter tips for compatibility with VMS-60 10X.
- Replacement needles SQ-116-165-01 with 2.4 µm radius tips have been set up.
- Cable SQ-116-032-01 with magnetic base MDL positioners must be used with gravity probe.

SQ-114-442-01 — Articulated Arm, DCM/MH2, With Probe Card Holder

- Articulated arm and mounting bracket for MH2 or DCM type positioner.
- Extended end supports MMP-12 mount.
- Allows positioning over Summit 11/12K probe card holder without the cover on.
- Allows probing through the center of probe card.

SQ-118-701-01 — Pico Probe Mount, R48/61, Model 18-B,19,28,29

- Required when mounting GGB pico probe models (18-b, 19, 28, and 29) on MMP-12/5 pico probe mount.
- Because the pico probe tip has two contacts (one for power), it cannot be reversed 180 degrees for chuck below platen configurations, (R48/61).
- This part replaces a mount on the MMP-12/5 that provides proper probe orientation.
- Can easily be installed in the field.

SQ-118-705-01 — Shaft, Gravity-DCP

- Shaft design allows adapting DCP to SQ-113-442 gravity probe.

SQ-126-127-01 — Probe Arm Adapter, Drop Down, R48/R55/R61, Flattened

- Flattened version of the standard drop-down probe arm member. It drops down as original one does, but does not extend as far.
- Used on MMP-12/5, MMP-51s, and PE5-xx/5 variations.
- For R48/R55/R61 stations.

SQ-133-611-01 — Probe Mount, MH/MS, Custom Drop Down, With PHJ/M

- MMP-51/J probe mount with standard drop down removed and replaced with custom flat drop down (SQ-126-127-01).

SQ-PE5-02/5-02 — Coax Probe, 50 ohm, 6 ft Cable, for R48/61

- Standard PE5-02/5 coax probe with six foot cable. Based on PE5-02/5.

SQ-PE5-02-05 — Coax Probe, 50 Ohm, No Cable,No Mounting Hardware

- Coax probe PE5-02 without cable and mounting hardware.
- Has nylon mount part only.
- Based on SQ-PE5-02-03 with s-bend.

SQ-PE5-32/5-04 — Probe,Triax 50 Ohm W/1.5 m Cable

- Probe includes 1.5 m cable.

SQ-PE5-32/5-10 — Triax Probe With 2 m Cable, No Mounting Hardware

- PE5-32-50 with 2 m (78.75") cable.
- Does not come with mounting hardware.

SQ-PE5-32/5-13 — Triax Probe With 24" Cable, No Mounting Hardware

- PE5-32-50 with 24" cable.
- Does not come with mounting hardware.

SQ-PE5-32/DCM-01 — PE5-32 Probe for DCM Positioner, 24" Cable

- PE5-32 probe is used with a DCM positioner on a Summit station.
- Same as a PE5-32 except a special mounting block allows mounting on a DCM positioner.
- Triax cable is 2 ft long.
- Cable measurement is from probe pin jack to triax connector; actual exposed cable is nominal 4" shorter.

SQ-PE5-32-06 — Probe, Triax, PE5-32, R1000, Custom

- PE5-32 triax probe has a drop down and short reach for use on SQ-R1000-19C to enable probing small geometries using MH2 postioners.
- SQ-R1000-19C design requires 8 probes.

SQ-PHJ-12-01 — Probe Holder, .08 Diameter x 12", Brass Rod

- 12 inch PHJ (non-plated) straight probe holder.

Probe Accessories

SQ-104-803-02 — Adapter, BNC (M)-Triax (F), Guard Thru, No Shield

- Adapter from BNC male to triax female with the triax inner shield connected to the BNC shield and the triax outer shield open.

SQ-129-009-05 — Waveguide, WR5-220 GHz, Custom

- Custom-shaped WR5 (220 GHz) waveguide. Waveguide provides a very small amount of flexing to enable probe planarization.
- The shape of this waveguide was specifically made for a 9k station using I220 probes with OML WR5 waveguide heads on SQ-112-960-03 and SQ-112-970-03 positioners.

SQ-123-845-02 — Adapter, 2.4 mm Male, 2.92 mm Male

- Precision adapter with a 2.4 mm male connector on one side and a 2.92 mm (K) male connector on the other.

SQ-118-405-01 — Torque Wrench, 8 lb 5/16 Inch, Agilent

- Torque wrench for 2.92 mm standard RF cable connectors with 5/16" hex size.

SQ-129-009-04 — Waveguide, WR8-140 GHz, Custom

- Custom-shaped WR8 (140 GHz) waveguide. Waveguide provides a very small amount of flexing to enable probe planarization.
- The shape of this waveguide was specifically made for a 9k station using SP-I140-M-GSG probes with OML WR8 waveguide heads on SQ-112-960-03 and SQ-112-970-03 positioners.

SQ-106-835-01 — Adapter, WPH Mount to Variable Pitch, West

- Similar to 106-835 but without 45° chamber and without side holes for mounting 106-564.
- Mounting pin for FP on East side of mount enables spacing closer to East positioner.

SQ-106-835-02 — Adapter, WPH Mount to Variable Pitch, East

- Similar to 106-835 but without 45° chamber and without side holes for mounting 106-564.
- Mounting pin for FP on West side of mount enables spacing closer to West positioner.

System Upgrades

Summit Upgrade Kits

SQ-132-010-02 — Upgrade Kit with Nickel Coax Thermal Chuck

- Field sub-assembly upgrade kit for existing Summit B-series 11/12K stations, includes:
  - 8-inch nickel coax thermal chuck
  - service loop
  - additional support items as needed
- Contact the Custom Produts group to determine:
  - if a specific station can be upgraded
  - what field upgrade kits are required
- It may take one or more sub-assembly kits to complete the desired upgrade.
- Upgrade must be installed by Cascade Microtech Service Engineer.
- Service call is not included and must be quoted separately.

SQ-132-010-04 — Upgrade Kit with Nickel Triax Thermal Chuck

- Field subassembly upgrade kit for existing Summit B-series 11/12K stations, includes:
  - 8-inch nickel triax thermal chuck
  - service loop
  - additional support items as needed
- Contact the Custom Products group to determine:
  - if a specific station can be upgraded
  - what field upgrade kits are required
- It may take one or more subassembly kits to complete the desired upgrade.
- Upgrade must be installed by Cascade Microtech Service Engineer.
  - Service call is not included and must be quoted separately.

SQ-132-010-04G — Upgrade Kit with Gold Triax Thermal Chuck

- Field subassembly upgrade kit for existing Summit B-series 11/12K stations, includes:
  - 8-inch gold triax thermal chuck
  - service loop
  - additional support items as needed
- Contact the Custom Products group to determine:
  - if a specific station can be upgraded
  - what field upgrade kits are required
- It may take one or more subassembly kits to complete the desired upgrade.
- Upgrade must be installed by Cascade Microtech Service Engineer.
- Service call is not included and must be quoted separately.

SQ-132-010-05 — Upgrade Kit with Nickel Triax Thermal High Temp Chuck

- Field subassembly upgrade kit for existing Summit B-series 11/12K stations, includes:
  - 8-inch nickel triax thermal high temp chuck
  - service loop
  - additional support items as needed
- Contact the Custom Products group to determine:
  - if a specific station can be upgraded
  - what field upgrade kits are required
- It may take one or more subassembly kits to complete the desired upgrade.
- Upgrade must be installed by Cascade Microtech Service Engineer.
- Service call is not included and must be quoted separately.

SQ-132-010-09 — Upgrade Kit with High Temp AttoGuard

- Field subassembly upgrade kit for existing Summit B-series 11/12K stations, includes:
  - high temp AttoGuard
  - additional support items as needed
- Contact the Custom Products group to determine:
  - if a specific station can be upgraded
  - what field upgrade kits are required
- It may take one or more subassembly kits to complete the desired upgrade.
- Upgrade must be installed by Cascade Microtech Service Engineer.
- Service call is not included and must be quoted separately.

SQ-132-010-06 — Upgrade Kit with MicroChamber

- Field subassembly upgrade kit for existing Summit B-series 11/12K stations, includes:
  - MicroChamber
  - additional support items as needed
- Contact the Custom Products group to determine:
  - if a specific station can be upgraded
  - what field upgrade kits are required
- It may take one or more subassembly kits to complete the desired upgrade.
- Station being sent to factory for upgrade must be received 3 weeks prior to shipment.
- Service call for removal and installation at customer site is not included and must be must be quoted separately.
- Customer to pay freight.

Top Plate

SP-104-686-04 — Ring Carrier for KLA-1007

Ring carrier for mounting up to 4 RF positioners on KLA 1007.

- Does not include any positioners.
- Special setup for Raytheon—they take responsibility for any additional adjustments to the ring carrier.

SQ-M62P-M64DP-01 — Upgrade Kit with Additional Positioners

- Hardware upgrade kit to M62P, includes:
  - two additional positioners
  - planarizable probe arms
  - support fasteners and hardware included on an M64DP (to allow the use of four positioners)
- Installation is not included.

SQ-M54-NO-POS — M54D Station with Add-On Top Plate

- Station with added steel bolt-on top plate to allow the use of magnetic or vacuum based positioners.
- No positioners included.

R48/R61 Upgrade

SQ-R48-4821HT-UPG — Upgrade Kit for R48 to R4821HT

- Upgrade kit adds thermal chuck to raised base R48 to make it equivalent to an R4821HT station.
- Custom Products group must be contacted before quoting to determine if this upgrade can be done in the field by a qualified service person or whether the station must be returned to the factory.
- Thermal controller is not included and must be ordered separately.
- Service call, return crate, and shipping are not included in this part number.

SQ-R48-R4841-UGF — Field Upgrade for R4800 to R4841

- Upgrade REL-4800 to R4841 guarded parametric (no chamber).
- Useable platen range reduced by approximately 1/2" by not having raised base assembly.
- (For factory upgrade, which includes raised base assembly, use SQ-R48-R4841-UG-1.)

SQ-R61-R6121-UGF — Field Upgrade for R6100 to R6121

- Upgrade a R6100 nonthermal station to an R6121 thermal station.
- 8-inch, nickel thermal chuck, ambient to 200°C.
- Kit includes the service chain.
- Useable platen range reduced by approximately 1/2" by not having raised base/raised platen.
- Kit does not include raised platen or raised base (applies to factory upgrades only).
- Controller not included.
- Service call is not included and must be quoted separately.

SQ-R61-R6141-UGF — Field Upgrade for R6100 to R6141

- Upgrade REL 6100 to R6141 guarded parametric (no chamber).
- Useable platen range reduced by approximately 1/2" by not having raised base/raised platen.
- Kit does not include raised platen or raised base (applies to factory upgrades only).

S300 Upgrade

SQ-117-955-01 — Upgrade Kit for 300mm Guarded Thermal Chuck

- Upgrade kit for S300 semi-automatic stations includes:
  - Complete 300mm FemtoGuarded thermal chuck assembly (-55 to 200°C).
  - MicroChamber service loop.
- On-site installation is not included.
- Service call for installation at customer site is not included and must be must be quoted separately.