

Cascade Impedance Standard Substrate Map

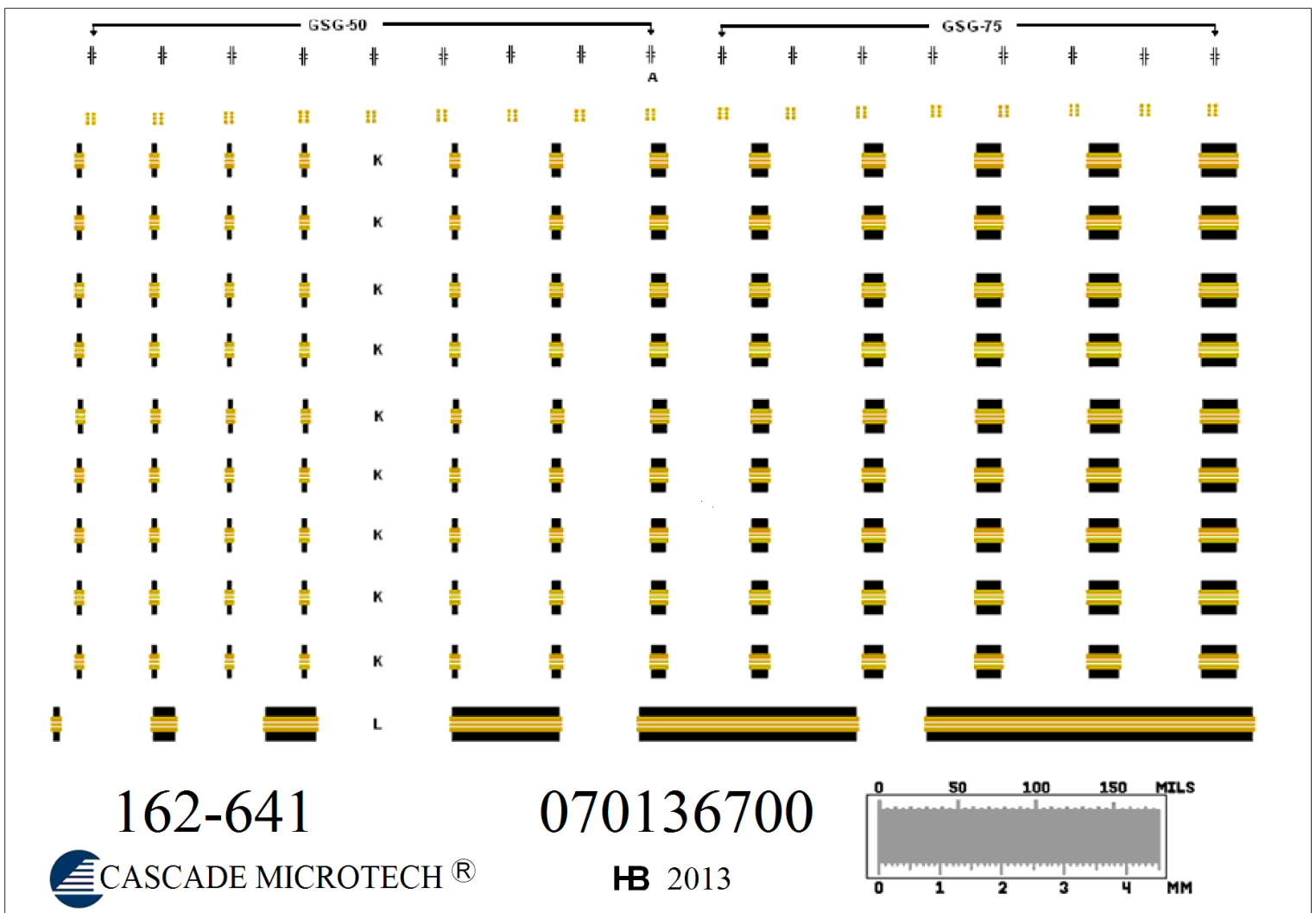
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> P/N: 162-641

Independent Verification Standards

Pitch: 50 μm - 75 μm

Configuration: GSG




> Key to Map

Key to the 162-641 Map

Substrate specifications: Material: Alumina; Thickness: 10 mils (254 μm); Dielectric constant: 9.9

Verification Lines		
ID	ps	μm
K1	0.5	135
K2	0.5	135
K3	0.5	135
K4	0.5	135
K5	1.1	215
K6	1.4	250
K7	1.9	315
K8	2.3	365
K9	2.7	420
K10	3.2	485
K11	3.8	570
K12	4.5	655
ID	ps	μm
L1	1	200
L2	3	450
L3	7	900
L4	14	1800
L5	27	3500
L6	40	5250



65 μm

Alignment Marks

Note: ISS must be mounted on absorber material (such as ISS Holder PN 116-344) during **Verification**.

Verification Line delays are based on an overtravel (downward movement of probe after initial touchdown on the substrate) of 25-50 μm for Infinity style probes. This amount of overtravel can be set before verification on the Independent Verification Standard (IVS) using the alignment marks (allows precise setting of probe separation and overtravel). Figure 1 shows that initial contact with the edge of the probe tips should be made at reference plane X. The desired overtravel and thus skate (forward movement of probe tips after initial contact with substrate) is then achieved by adjusting the Z height on the positioner to move the edge of the probe tips to reference plane Y. This can also be seen from the photographic images shown in Figure 2. Probe separation will need to be adjusted in the x-axis before verification on different line lengths



Figure 1: Alignment marks

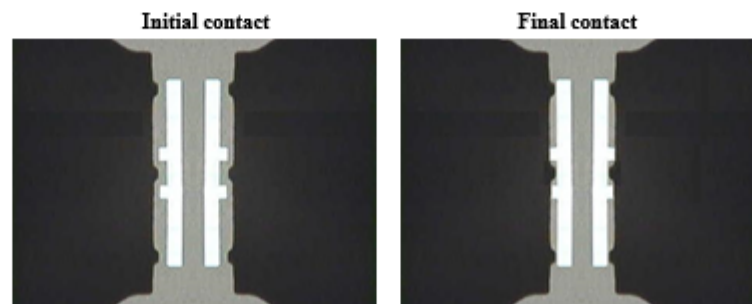


Figure 2: Images showing correct alignment and placement of probe tips of Infinity style probes.