

# ReAlign™ for SUMMIT200

## Fully-Automated Probe-to-Pad-Alignment with Vertical Probe Cards

FormFactor's ReAlign™ technology is now available for the SUMMIT200. ReAlign has been an exclusive feature of the CM300xi for many years. It sets the benchmark in automated probe-to-pad alignment for applications with limited microscope view such as vertical and Pyramid probe cards, and enables autonomous semiconductor test at multiple temperatures.

The new ReAlign module fits seamlessly into the modular concept of the SUMMIT200 probe station, which can be scaled from a semi-automated engineering system to a

fully-automated high-volume niche production system. ReAlign for SUMMIT200 is field-upgradeable\* and easily interchangeable with other applications such as FormFactor's Autonomous RF Measurement Assistant. It is one more component that complements the SUMMIT200 for varying measurement requirements.

ReAlign for SUMMIT200 comprises Near-On-Axis Technology, which enables higher precision probe-to-pad alignment and lower station footprint than other solutions.



### Autonomous Operation for Vertical Probe Cards

Faster time to data with automated probe-to-pad alignment



-40 to 125°C

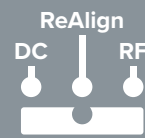
### Measurements Over Temperature

Optional RF/DC cover: EMI-shielded, dark and frost-free



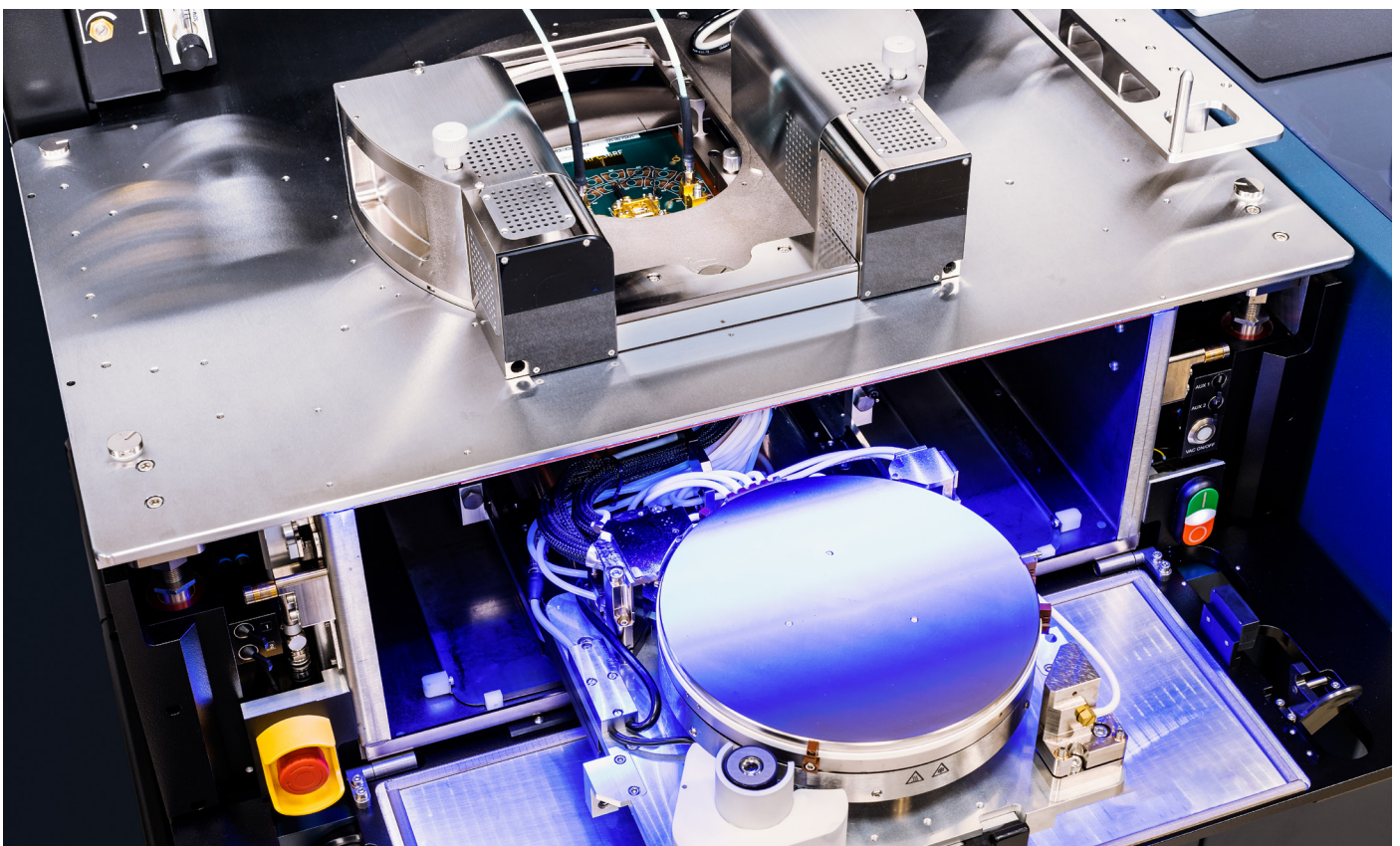
### Near-On-Axis Technology

High thermal stability with small station footprint



### Modular Design

Interchangeable with other application layers, e. g. RF TopHat



\*Requires PTPA-ready option.

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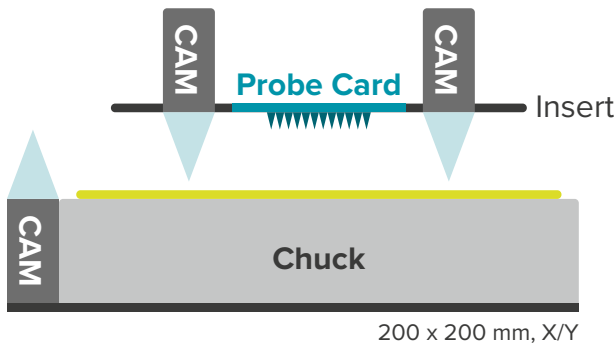


## High Precision With Near-On-Axis Technology

Vertical probe cards enable testing of advanced devices for applications such as [5G](#), [the internet of things](#), [optical sensors](#) and more. These applications require probing on small pads with low forces and minimum scratch, as well as excellent electrical contact over an extended temperature range.

Vertical probe cards such as FormFactor's Pyramid probe card meet these advanced requirements with [state-of-the-art signal integrity](#) and [minimal pad damage](#). However, the design of vertical probe cards limits the top-microscope view, making traditional on-axis probe-to-pad alignment no longer practicable.

To overcome this challenge, ReAlign for SUMMIT200 utilizes up to three cameras to detect the location of the wafer alignment marks from the top, and the probe tips from the bottom. With the data from the different cameras, the ReAlign software module (part of Velox) aligns the wafer or each die under test properly to the probe card in X, Y, Z and Theta.



ReAlign for SUMMIT200 has been designed as an easy-to-install module with [Near-On-Axis Technology](#). By positioning the cameras as close to the center as possible, the system performs at highest precision over an extended temperature range. ReAlign fits perfectly into the compact footprint of the SUMMIT200.

## Up to Five Auxiliary Locations

To support unattended operation, a new auxiliary chuck has been developed, increasing the number of locations for auxiliary devices to five. The new AUX chuck is capable of holding a 1 x 1 inch custom calibration substrate for FormFactor's Pyrana probe card, another cleaning or contact substrate and an additional cleaning pad.

## Supported Probe Cards\*

- / Pyramid (RF/DC vertical)
- / Celadon (High Temperature Cantilever)
- / Takumi (DC vertical) and others on request

*\*Contact your local sales representative for compatibility.*

## Easy Swapping Between Applications

The ReAlign module is easily removable to support any other available application layer on the SUMMIT200. It can be reinstalled within minutes.

