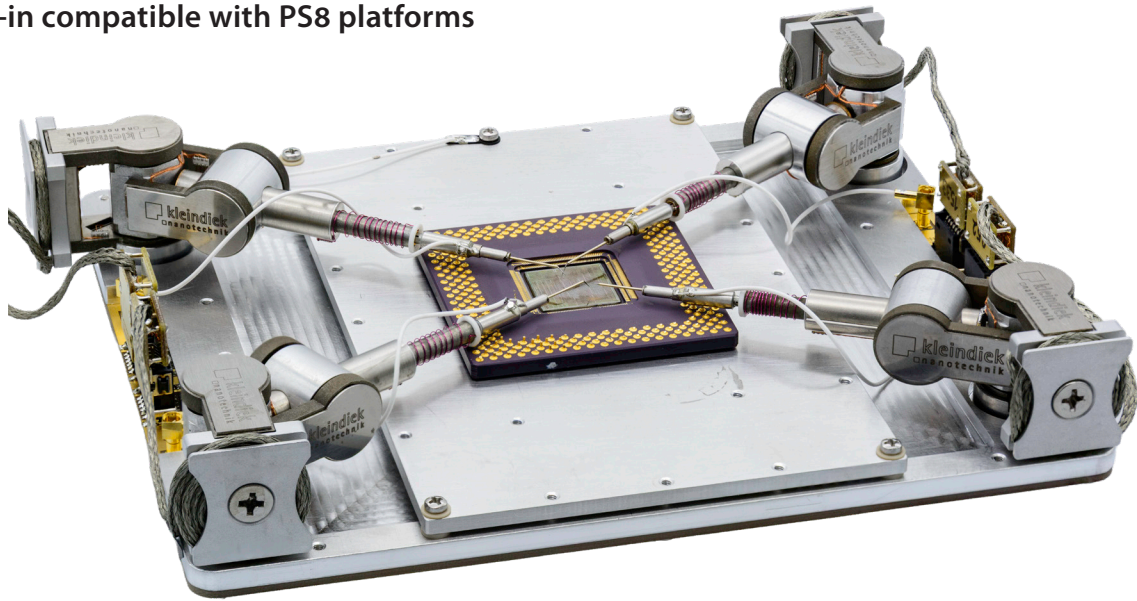
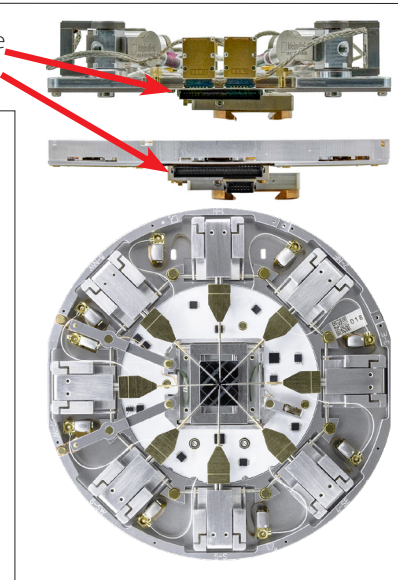


NW4 - Package FA Platform

Plug-in compatible with PS8 platforms



The NW4 is plug-in compatible with the PS8 platforms

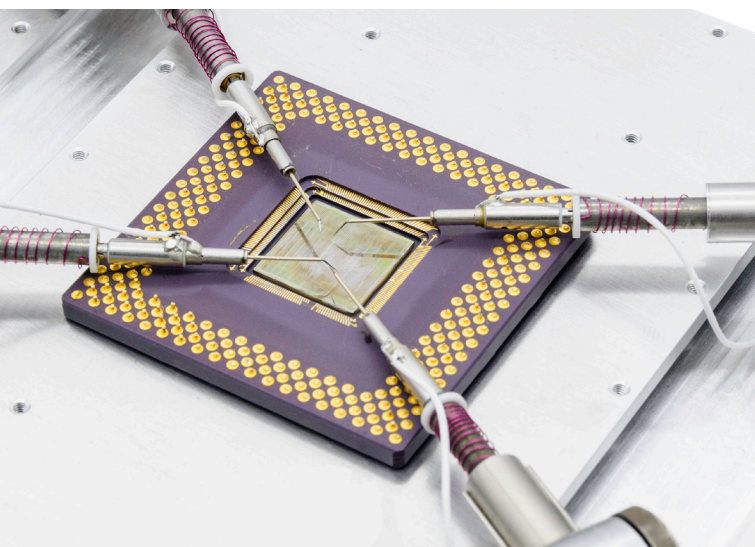


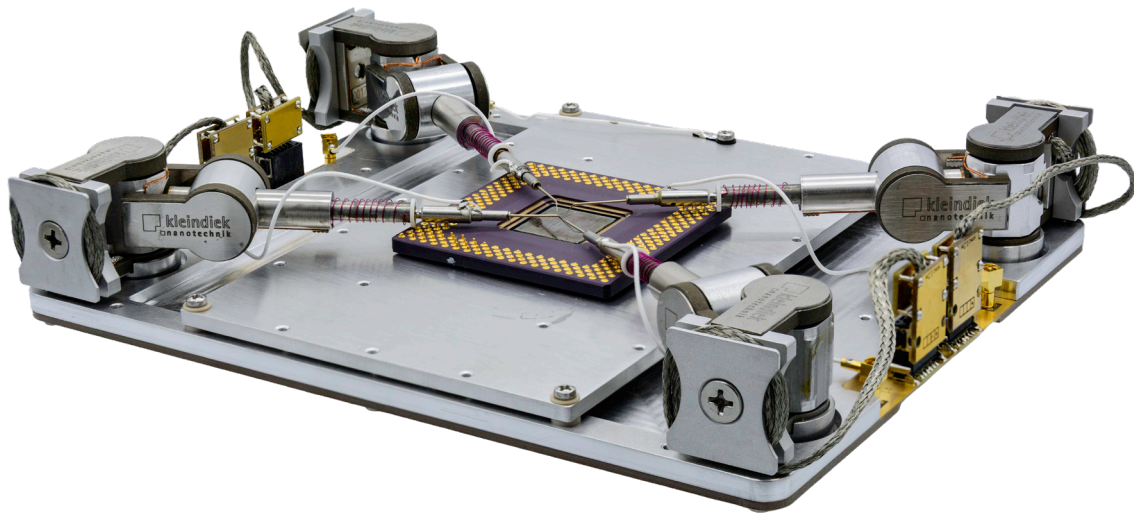
The NW4 platform was specifically designed to address nanoprobe applications on packaged devices or other large substrates - up to 120 mm x 120 mm in size! It should be noted that the sample area that can be imaged using the SEM depends on the microscope's chamber dimensions.

The load lockable base makes exchanging samples and replacing probe tips quick & easy, as these tasks can be accomplished without breaking vacuum in the SEM's main chamber.

This allows placing probe tips on sites that are far away from each other. Since the entire platform can be moved using the microscope's stage, it is possible to place a probe and then track EBIC or EBAC traces over large distances. One of the NW4's

key features is that it can be used as a drop-in replacement for a PS8 Prober Shuttle (or vice versa). That is, both platforms utilize the same vacuum side hardware and mounting so that the two systems can be used in an alternating fashion - even using the same air side controllers, etc. Thus, combining the NW4 with a PS8 Prober Shuttle yields a tool set that is able to address all nanoprobe applications from die level measurements on the most recent nodes to packaged samples on large substrates.





Applications

- Package FA
- Nanoprobng on large substrates
- Following long traces using EBIC/EBAC

Features

- Sample dimensions up to 120 mm x 120 mm
- Sample thickness up to 30 mm, depending on dimensions and load lock utilization – samples with very large XY-dimensions may be limited to 6 mm Z height
- Platform load lockable
- Up to four probes
- Low noise signal leads for all four probes
- Low noise signal lead for the sample/bulk
- Plug-in compatible with PS8 platforms - can utilize existing hardware/controllers
- Combining platforms (Nw4 and PS8) yields FA capability from smallest nodes to large packages...

Technical specifications (Platform)

- Platform dimensions 162 mm x 134 mm
- Space for up to four MM3A-EM manipulators
- Load Lock Compatible
- Same Connector as Prober Shuttle
- Low Current, Low Noise measurement
 - Current measurement limit 3 fA @ 1 Hz
 - Insulation leakage current 50 fA at 1 V
 - Signal conductor resistance 6.5 Ω
 - Maximum voltage 210 V
 - Maximum current 200 mA

Technical specifications (MM3A Probes)

- Length 62.1 mm
- Width 20.4 mm
- Height 25.4 mm
- Weight 45 g
- Operating range AB 240°
Operating range C 12 mm
- Speed AB up to 10 mm/s
Speed C up to 2 mm/s
- Resolution A 7×10^{-9} rad (0.35 nm)
Resolution B 7×10^{-9} rad (0.25 nm)
Resolution C 0.05 nm
- Lowest pressure 10^{-7} mbar
- Material Stainless steel, aluminium

A = LEFT/RIGHT
B = UP/DOWN
C = IN/OUT

Further information

- Contact us at info@kleindiek.com
- Find your local agent at www.kleindiek.com