

CM300xi-ULN

Verified, 4x Faster, Accurate Measurements – Without the Noise

FormFactor has pioneered new precision electrical measurement innovations for the past 30+ years. Patented technologies such as MicroChamber®, FemtoGuard™ and PureLine™ revolutionized on-wafer testing and set the industry standard for DC, Flicker Noise and RF measurements.

As next generation devices at the 5, 3, and 2 nm technology nodes emerge – targeted for 5G and

beyond applications – new testing capabilities are needed. We have enhanced the industry-leading CM300xi with revolutionary technologies to meet these emerging test needs. The new CM300xi-ULN now enables unprecedented measurement performance and achieves four significant industry firsts in the arena of on-wafer, low frequency flicker, RTN, and phase noise testing.



PureLine 3 Technology

First automated probe station to achieve **-190dB** spectral noise*



Autonomous 24/7 Operation

Up to **4x faster** flicker noise thermal testing on **30 μm** pads



Plug In and Go

Integrated **TestCell**
Power Management



Reduce Setup Time and Costs

Exclusive low noise **site survey**,
and **system verification** services

* Typical noise (dBVrms/√Hz, 1kHz to 1MHz), with prober and thermal system enabled.

Ultra Low Noise Probing System



CM300xi ULN



FormFactor’s new CM300xi-ULN (Ultra Low Noise) is a revolutionary 300 mm wafer probing system designed for highly accurate low frequency flicker noise (1/f), random telegraph signal noise (RTN or RTS), and phase noise measurements of ultra-sensitive devices.

With the newly patented PureLine™ 3 technology, the ULN probing system enables up to 32x lower noise (1 kHz), eliminating 97% of the environmental noise experienced in previous probe systems, improving

“The CM300xi-ULN enables up to 32x lower noise, for improved device characterization and modelling at the 7/5/2 nm technology nodes targeted for 5G and beyond applications.”

device characterization and modelling at the 7/5/2 nm technology nodes targeted for 5G and beyond applications.

When integrated with noise test equipment (flicker noise, RTN, phase noise), the CM300xi-ULN offers the industry’s highest test throughput, using Contact Intelligence™ with motorized probe positioners, enabling fully Autonomous DC and low frequency noise probing with multi-DUT layouts for complete hands-free 24/7 operation.

Finally, the CM300xi-ULN takes the complexity out of low noise TestCell optimization. Just plug it in and go. Low-noise Site Survey and System Verifications significantly reduce setup costs and tool deployment time. This allows lab engineers to focus on getting good device data, that can be used to reduce the number of costly re-designs and accelerate time to market with lower development costs.



Motorized positioners with patented FlexShield enable highest accuracy in a dark, shielded and frost-free environment.