

See your future in our Direct Write Exposure Solution

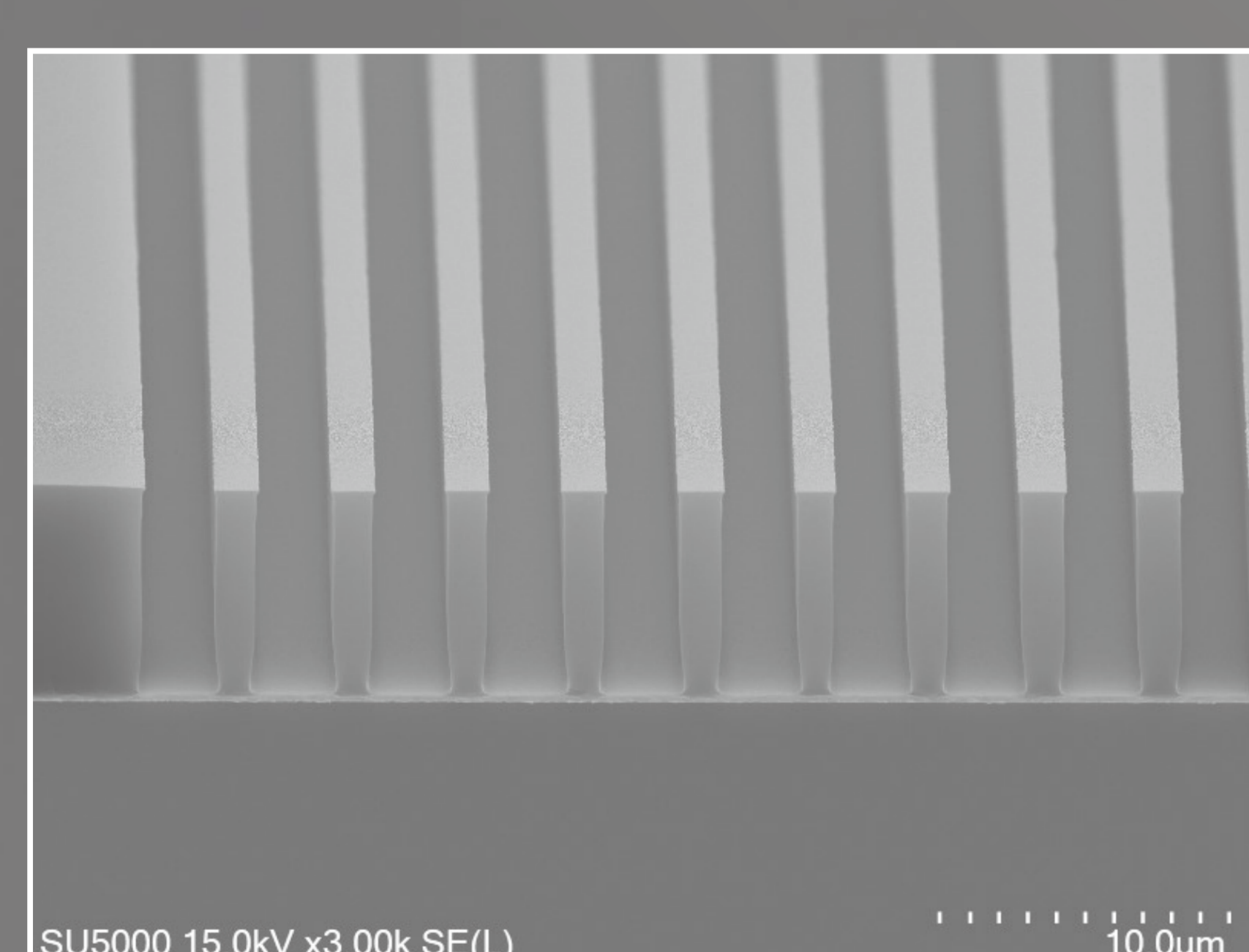


DE-2

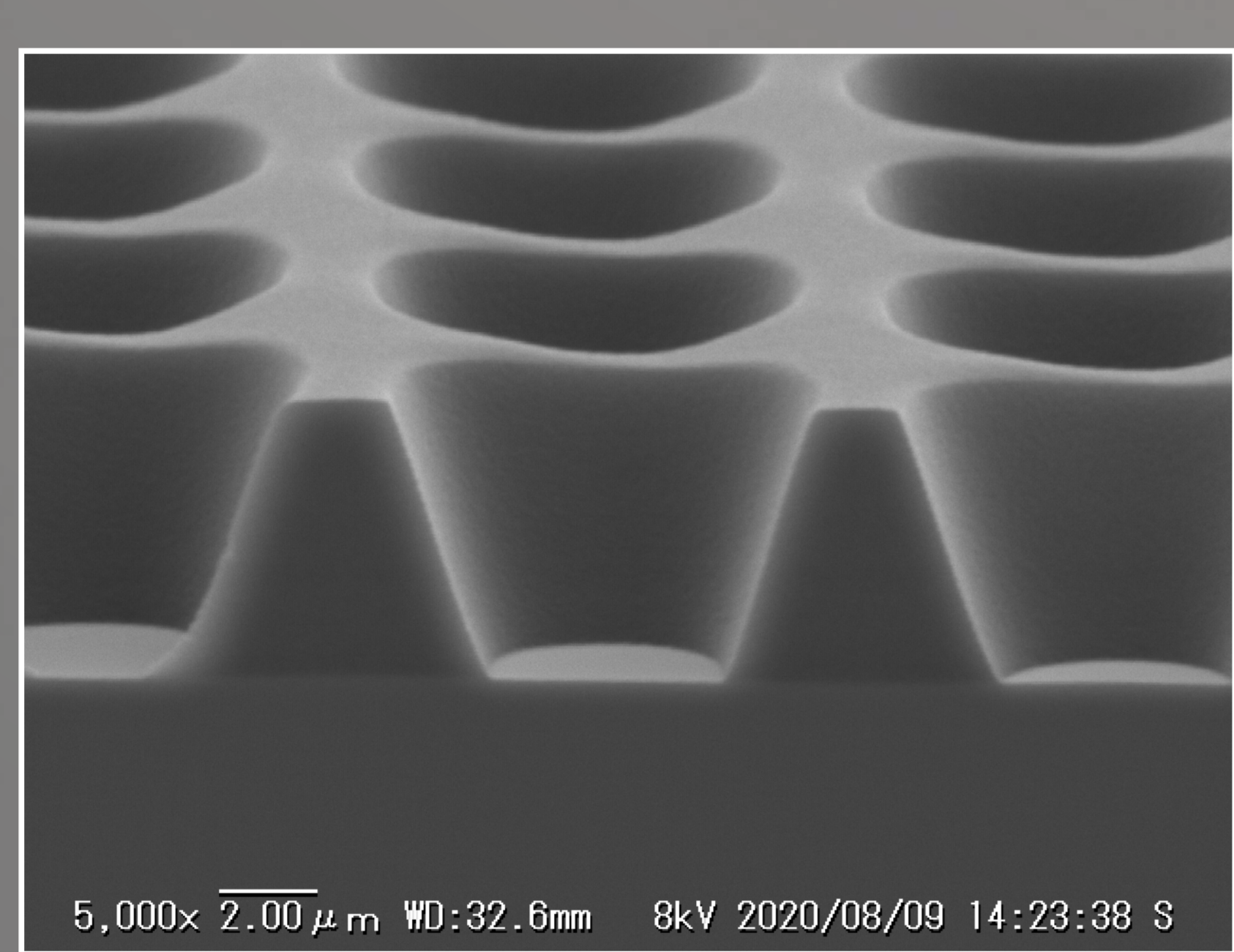
2 μ m L/S Direct Write Exposure System

DE-2 W300 for 300mm (12") Wafer **New**
DE-2 P600 for 600 x 600mm Panel **December 2021 Debut**

- Maskless Direct Imaging for Fan-Out WLP & PLP and High Precision Packaging
- Minimum Line/Space = 2/2 μ m imaging capability
- Overlay accuracy \leq 1 μ m
- Optional Deca's **Adaptive Patterning™** connectivity



L/S 2/2 μ m
Liquid Photo-sensitive Resist
7 μ m thick



Via opening 5 μ m dia. 10 μ m Pitch
Liquid Photo-sensitive Polyimide
7 μ m thick

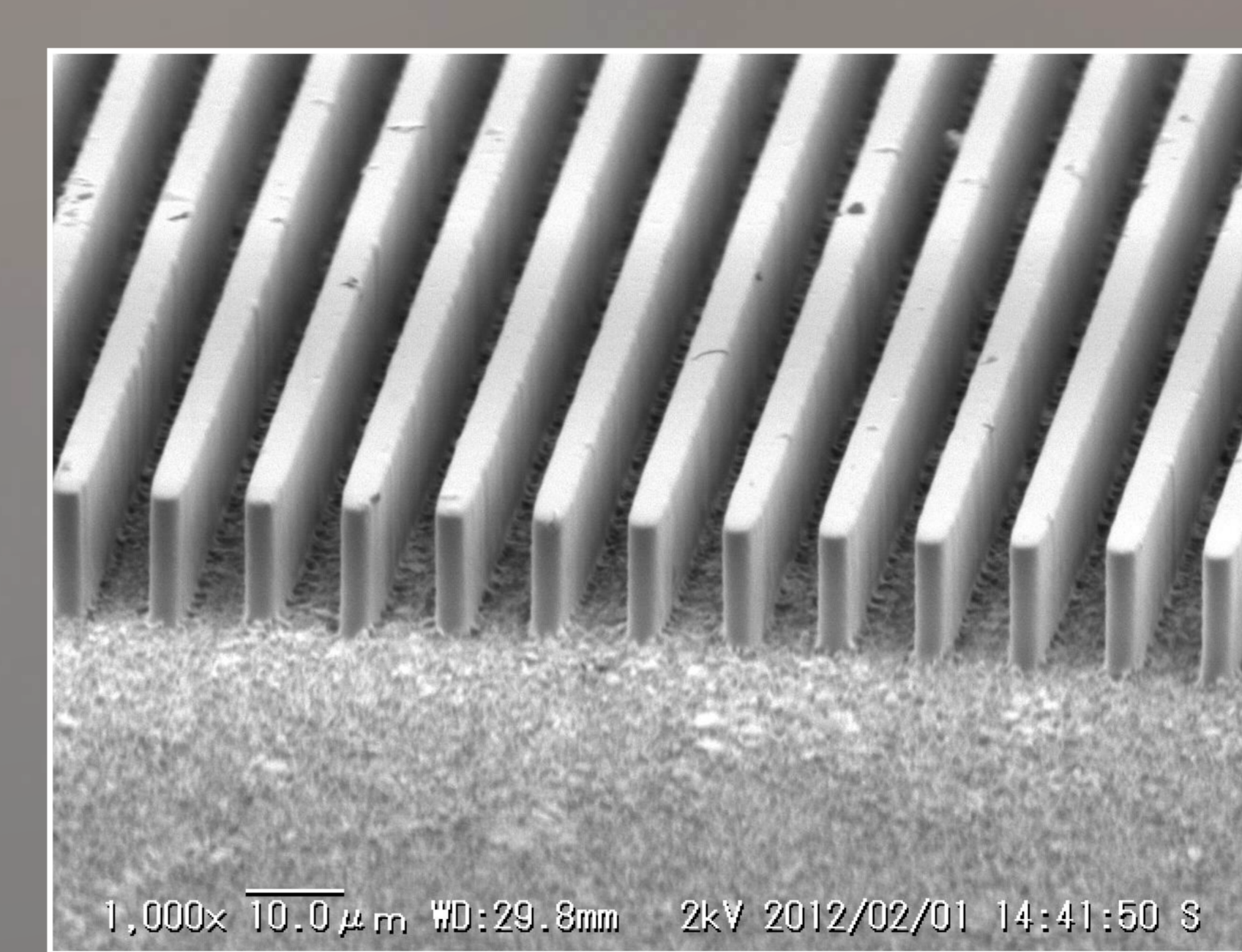


DE-8

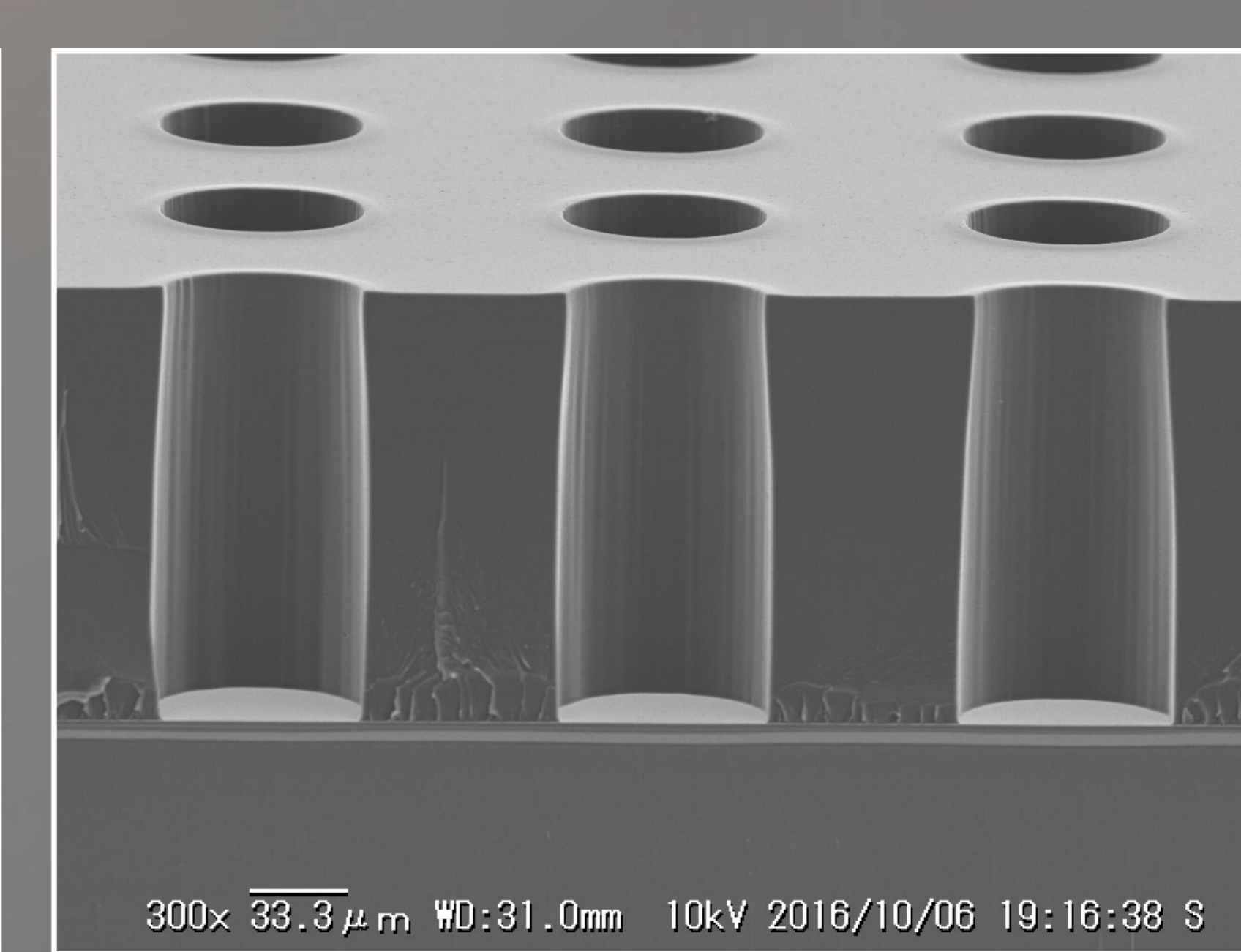
Direct Write Exposure System for FO-WLP/PLP

DE-8 W300 for 300mm (12") Wafer
DE-8 P600 for 600 x 600mm Panel

- Maskless Direct Imaging for FAN-OUT WLP & PLP
- Minimum Line/Space = 8/8 μ m imaging capability
- Overlay accuracy \leq 7 μ m
- Optional Deca's **Adaptive Patterning™** connectivity



L/S 5/5 μ m
Dry Film Resist
15 μ m thick



Opening 70 μ m dia. 140 μ m Pitch
Dry Film Resist
160 μ m thick

Contact: sales@ushio.eu



by DECA

As a product moves through the manufacturing process, Adaptive Patterning™ [AP] customizes each lithographic layer on a device-by-device basis to ensure the highest possible yield.

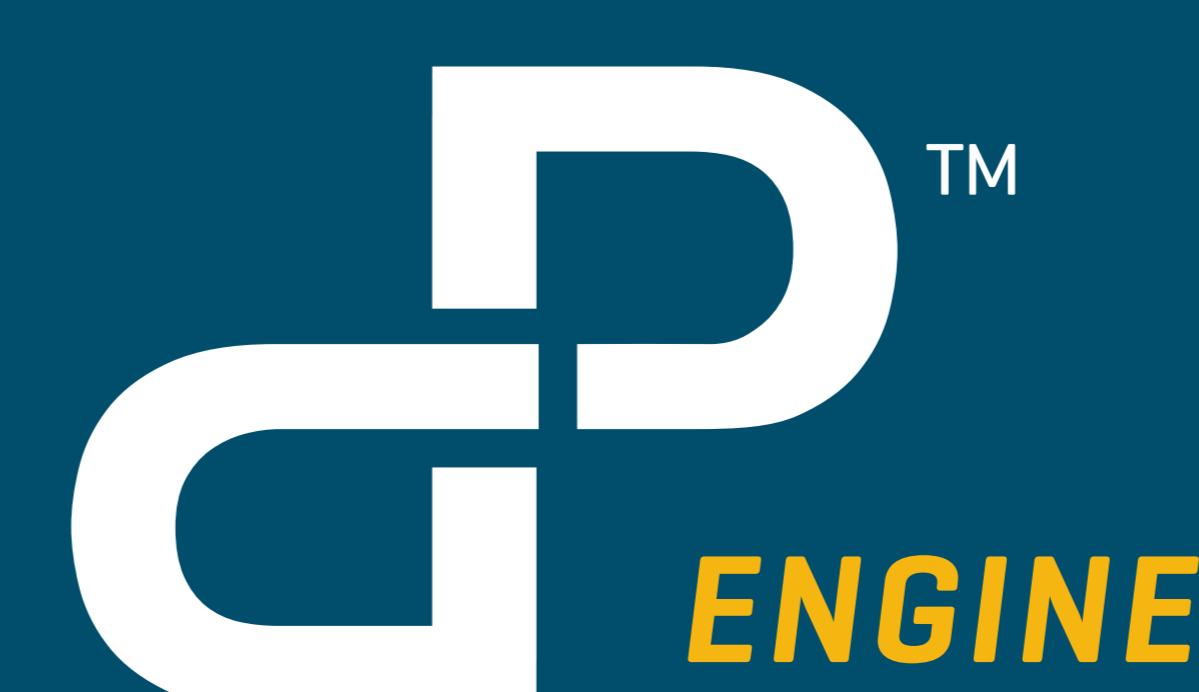
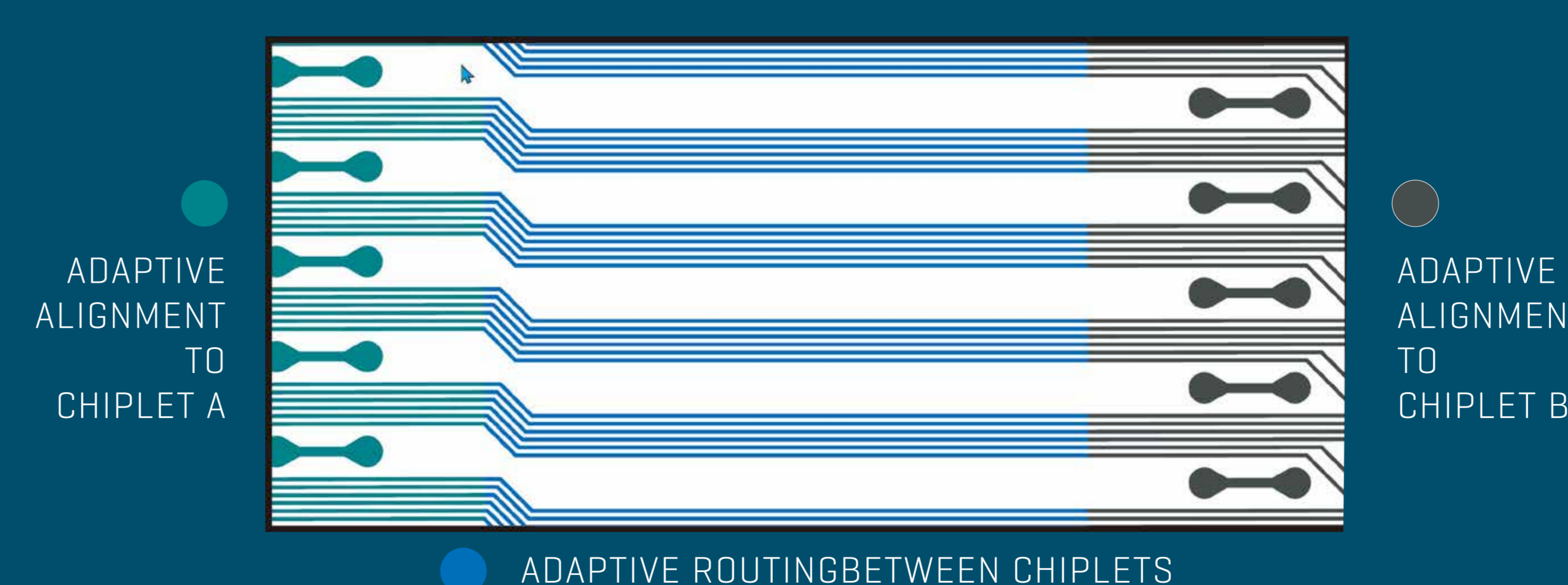
1. DESIGN

Create nominal design with instructions for AP (one-time for each new product)



2. ADAPT

Execute real-time design optimization during manufacturing for each device on every panel



3. EXPOSE

Implement optimized design with LDI on each device on every panel

