

# Corning's innovative Continuously Sintered Ceramic process enables breakthrough ceramic solutions in ultra-thin form factors

Continuously Sintered Ceramic



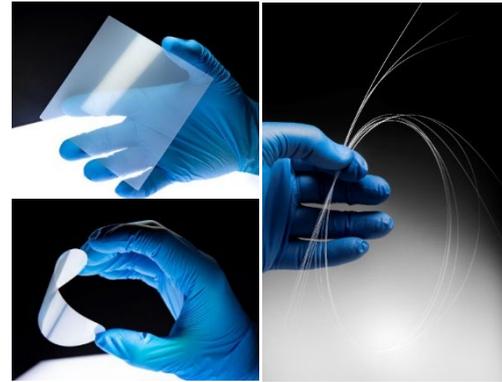
Produced in rolls  
Up to 300ft long

High-precision processing



Wafer and Panels 100 mm wide

Ultra-thin ceramic substrates and components



Flexible form factors

Fully dense  
Fine-grained  
High purity  
Uniform  
Smooth native surface  
+  
Unique form factors

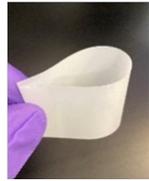
40u Alumina



40u Silica



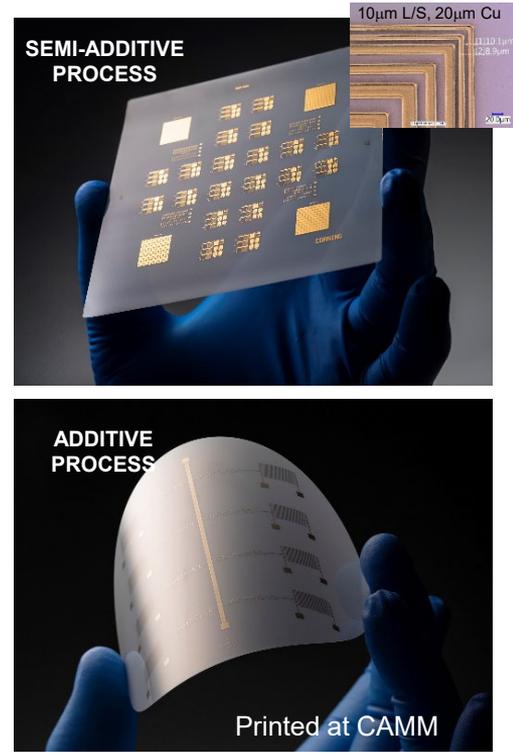
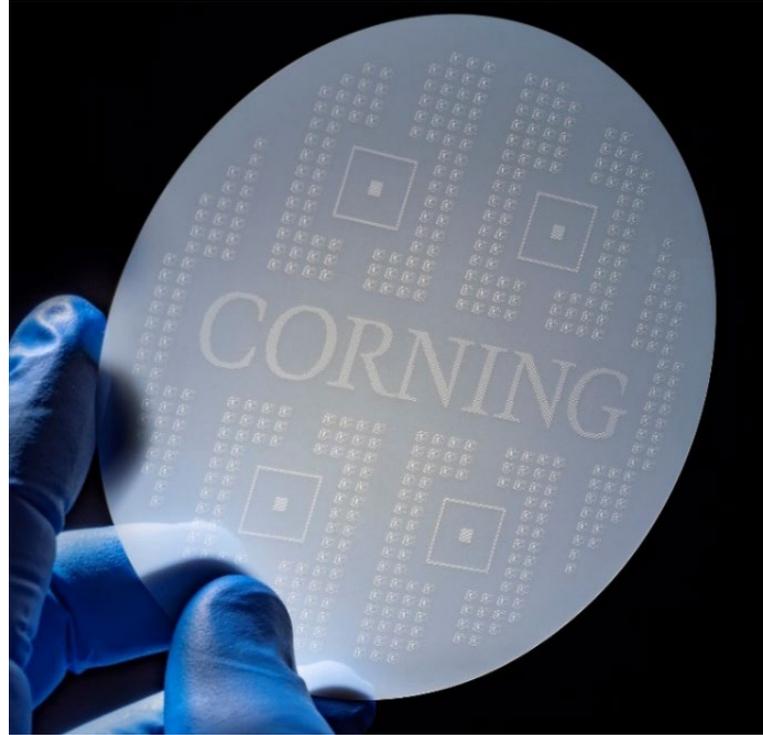
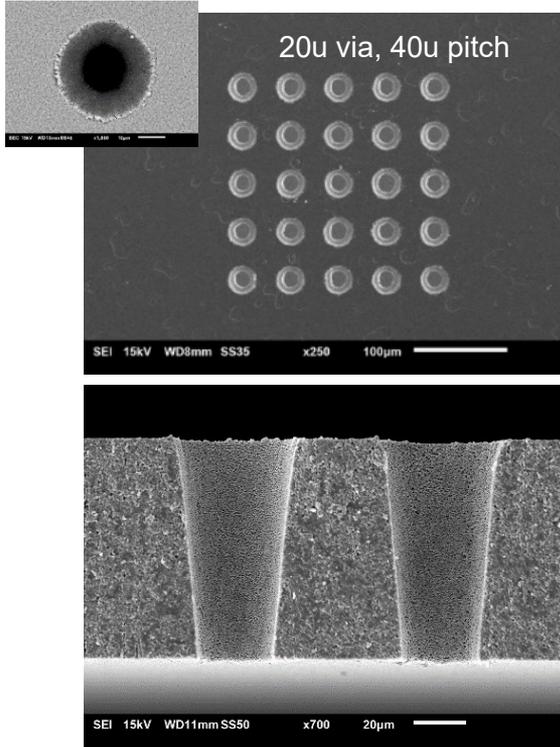
20u 3YSZ



60u PZT



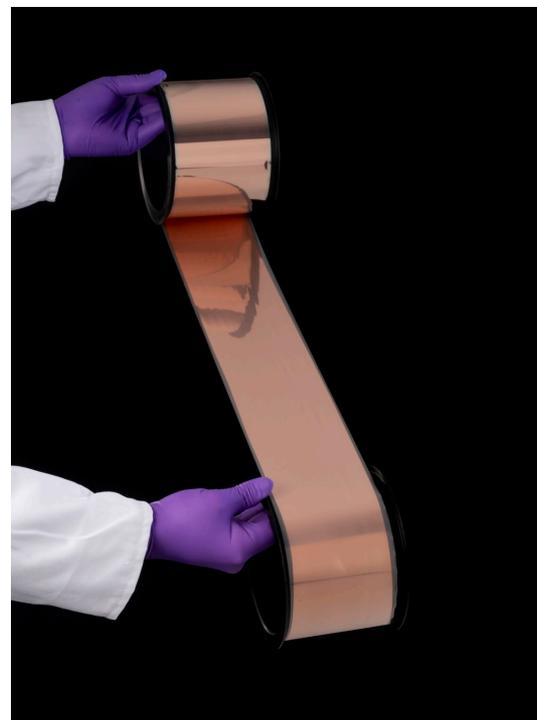
# High quality, small and dense via array through laser ablation, fine line and good Cu adhesion enables increased packaging density



# Feasibility of web conveyance and R2R vacuum coating demonstrated on Corning Ribbon Ceramic for process scaling

100 mm x 5m, 40 um alumina

Aluminum sputter coating, on 6.5" roller at 0.6fpm



Sputter coated Ti/Cu seed film on 20 um thick 3YSZ ribbon ceramic