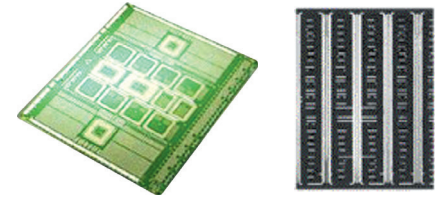


High Density and High Layer Count PCB

High-performance and High-reliability PCB for Supercomputers, Network systems, AI Data Center Servers and also Millimeterwave systems

High Density and High Layer Count PCB

- High-density PCB with narrow pitch pattern and Vias with high-aspect ratio.
- Best design rule for customers' low-loss transmission requirements.
- High Tg PCB for Pb free mounting, application requirements, etc.



PCB for Servers

X-section

Layer construction : 50 layers with IVH
 Thickness : 7.2mm
 Via diameter : $\phi 0.35\text{mm}$ (IVH $\phi 0.12\text{mm}$)

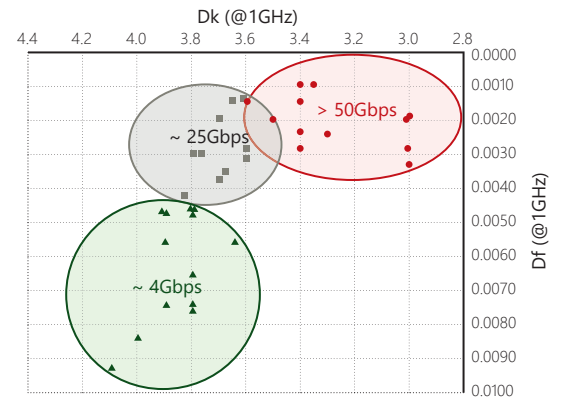
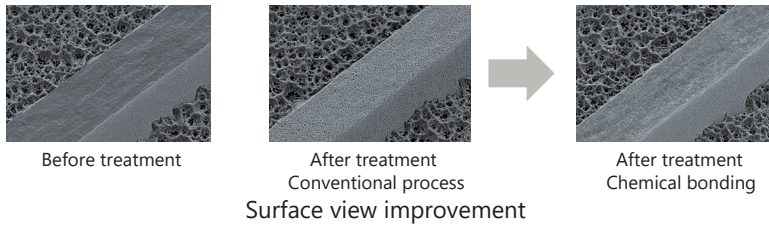
Design Rule

(mm)

Thickness	≤ 1.6	≤ 4.0	≤ 5.0	≤ 6.5	≤ 8.0
Via Diameter	$\phi 0.15$	$\phi 0.20$	$\phi 0.25$	$\phi 0.30$	$\phi 0.35$
Land Diameter	$\phi 0.35$	$\phi 0.40$	$\phi 0.45$	$\phi 0.50$	$\phi 0.55$
Line/Space	0.05 / 0.05-0.09 / 0.09 (depends on Cu thickness)				

High-speed transmission: Transmission-loss improvement

- Wide range of optimal low loss materials.
- Over 50Gbps signal transmission throughout the board.
- Chemical bonding technology to minimize the transmission loss due to skin effect at high frequency.



Over 50Gbps transmission enabled by optimal material and Chemical bonding technology

High speed transmission: Reflection loss minimization

- Best structure to minimize reflection noise without open stub.
- Hybrid layer configuration composed of high density wiring layer and high speed low-loss transmission layer.
- Optimal design rules and layer structure at the early stage of PCB design.

