EXPT NovaBond® EX-S2

mks Atotech

ULTRA low roughness
bonding enhancement
for IC substrates

After cleaning / before etching

After 50-150 nm etching

0

line width reduction/
line height reduction

40%

lower total costs of ownership

The most innovative IC substrate bonding enhancement

NovaBond® EX-S2 is our high-tech solution for IC substrate inner layer bonding. It combines the advantages of competing processes by applying a brand-new innovative technology that ensures high SI performance, thermal reliability and bond strength. This is achieved by creating a nano-roughness in symbiosis with a special patented silane, while not affecting the shape of the traces.

Features and benefits

- Uniform and constant nano-roughening regardless of copper surface type
- High compatibility to various high speed substrate materials
- Preserving conductor shape and size
- Very suitable for ultra fine line applications with L/S < 5/5 µm
- Signal integrity similar to non-treated; 2% better than low rougness oxide replacement
- Great peel strength