

# OPC FLET PROCESS

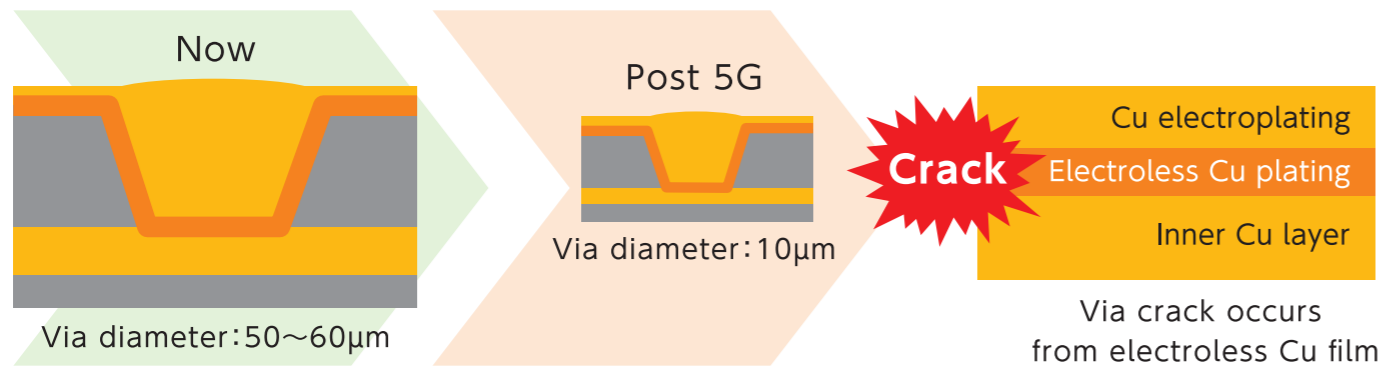
Electroless copper plating process to solve Weak-Micro Via

## Current problem of IC substrates

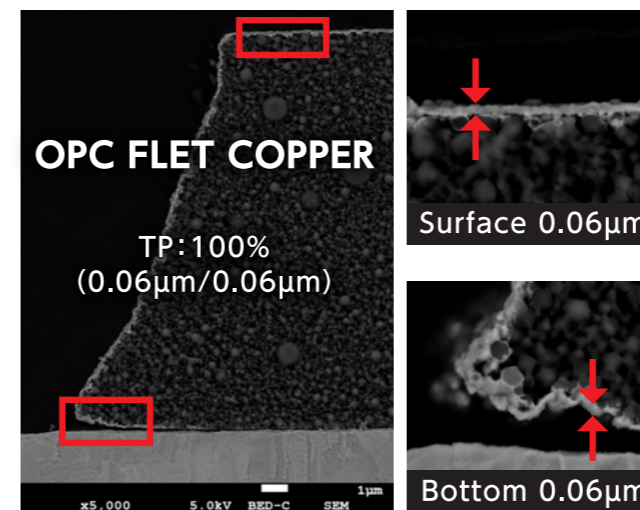
Small via size

Reduced joint area

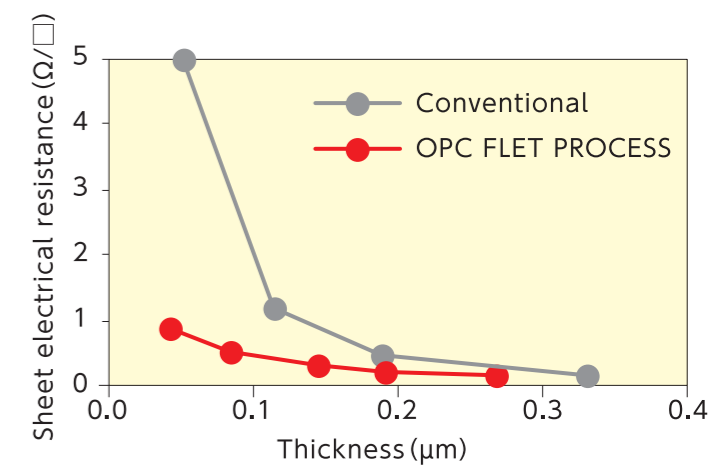
Very thin, smooth inner Cu layer



High covering power by small thickness



Increase electric conductivity with small thickness



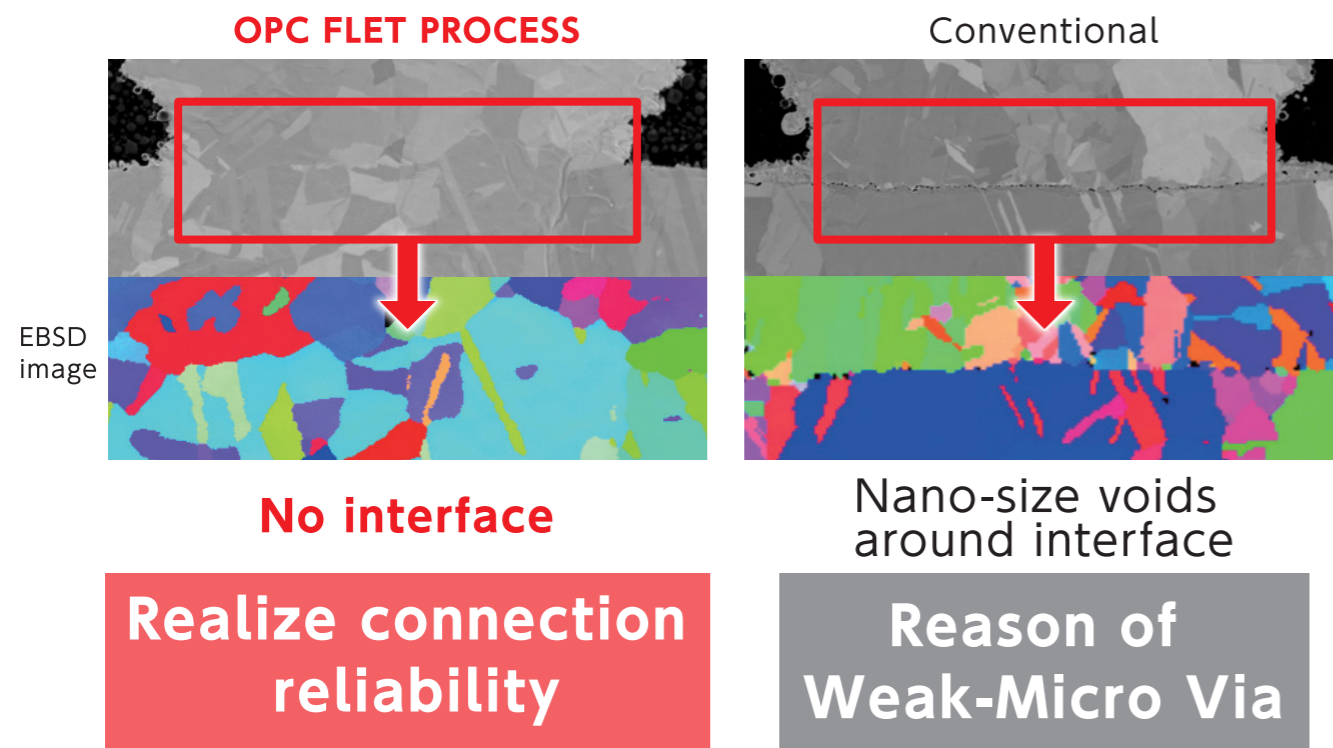
High throwing power

Obtain low sheet resistance

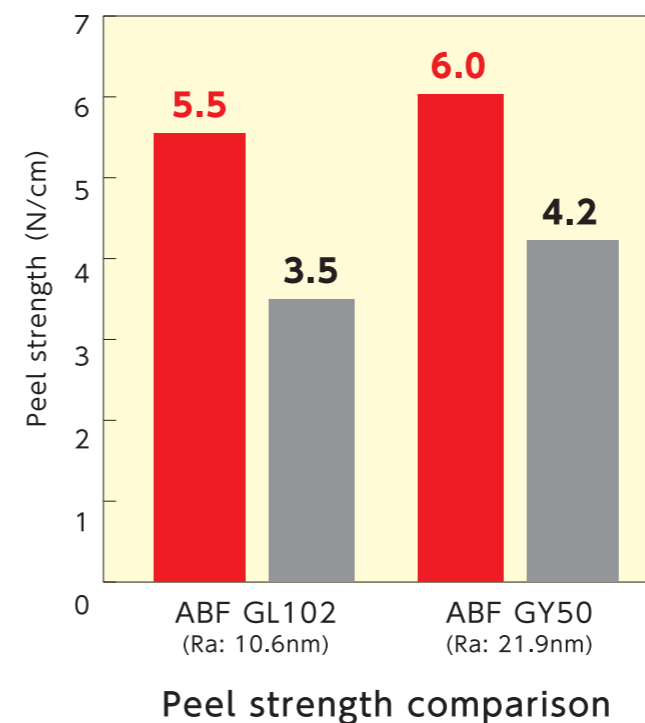
High adhesion to low profile materials

L/S=1/1 μm Realization

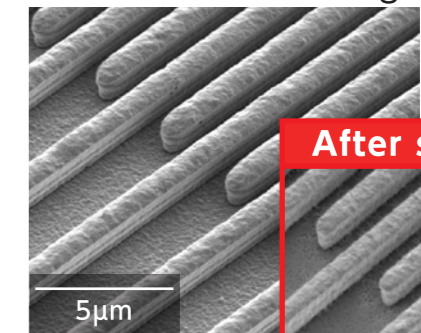
## High Cu purity, small thickness for via-bottom void free



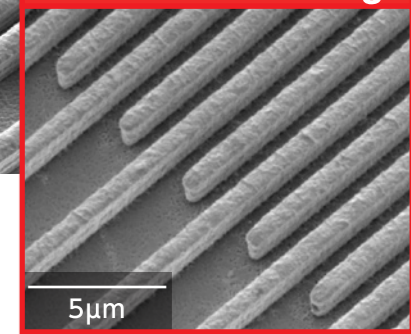
OPC FLET PROCESS



Before seed etching



After seed etching



Cross-section image after flash etching

Achieve ultra-fine patterning

ABF is an insulating films of Ajinomoto Build-Up Film by Ajinomoto Fine-Techno Co., Inc.