MICRO•CHEM

OmniCoat™

Allows easy stripping of hard to remove photoresists and other materials plus improved adhesion

| FEATURES		BENEFITS
Easy, fast, clean & safe removal	→	Can now strip SU-8 & SU-8 2000. Reworks can be performed
Uses existing strippers and processes	→	No highly dangerous wet chemistry or reactive gases required
Uses a very thin coating	→	Minimizes or eliminates under plating
Applied by spin coating	→	No deposition layer required
Adhesion Promoter	→	Improves adhesion to difficult substrates like Au, Cu and Quartz

| Acc.V | Spot Magn | Det | WD | Exp | | 1.0 μm |
| 30.0 kV | 2.8 1832x | SE | 16.9 1 | | ES NI FINGERS | |
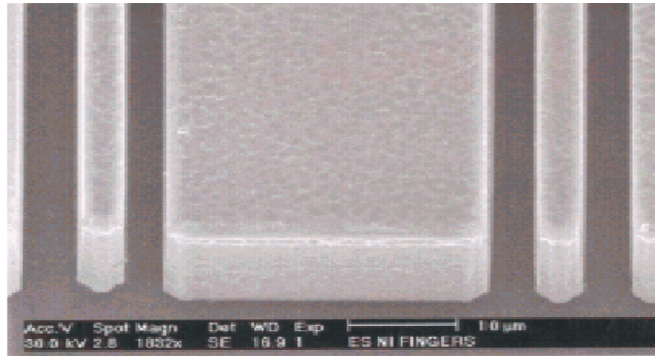
Plated Nickel structure after removal of SU-8 using *OmniCoat*™
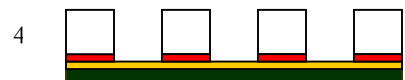
1) Coat and Bake *OmniCoat*™ over seed layer

2) Coat and Bake SU-8 or SU-8 2000

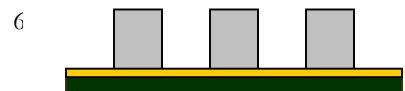3) Expose and Develop SU-8 or SU-8 2000

4) Develop (wet or dry) *OmniCoat*™

5) Plate metal

6) Strip resist in Remover PG

Processing Guidelines

COAT RELEASE LAYER:

Dynamic dispense: 1 - 4ml (depending on substrate diameter) of **OmniCoat**™

Spin: 500 rpm for 5 sec with acceleration of 100 R/s

        3000 rpm for 30 sec with acceleration of 300 R/s

Note: For effective removal a thickness of no less than 17nm should be applied. Thicker coatings could be more effective depending on the substrate type

Bake: 200° C hotplate for 1 min; allow substrate to cool to room temperature

COAT, EXPOSE, PEB & DEVELOP SU-8 or SU8-2000:

Perform normal SU-8 processing according to the guidelines from datasheet.

DEVELOP **OmniCoat**™:

O_2 Plasma removal: Typical de-scum program

        Power – 100 W

        Flow Rate – 35,

        Pressure – 190 mTorr

        Time – 30 s

Wet removal: MCC 101 Developer: immersion with agitation; 1 min; DI rinse; 2min

        Microposit MF 319: immersion with agitation; 30 sec; DI rinse; 2 min

        Other developers can be used. The process must be adjusted for different developer formulations. It may be beneficial to perform a short O_2 plasma flash descum after wet development.

PLATE or OTHER PROCESSING

STRIP SU-8/ SU-8 2000:

Immersion in Remover PG (NMP) at 80°C for 30 min**. Ultrasonics may be required.

(**Depends on feature size and orientation. >5 um)