超微細回路形成および最終表面処理

トップUFPプロセス

Ultra-fine Pattern Formation and Final Surface Treatment

TOP UFP PROCESS

SAP

絶縁樹脂ABF材

Insulating resin ABF substrate

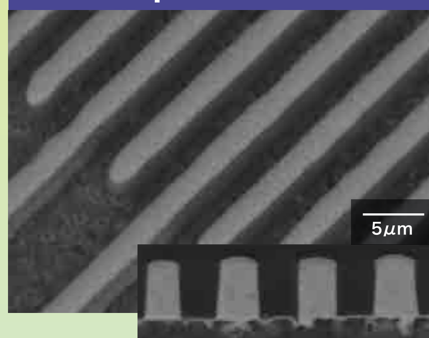
MSAP

極薄銅箔(JXUT-Ⅲ 1.5μm厚)【JX金属(株)製】

Ultra thin copper foil JXUT-III 1.5μm thickness

(made by JX Nippon Mining & Metals Corporation)

L/S=2/2μm (SAP)

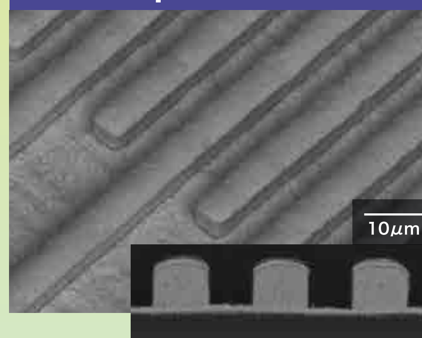


デスミア・無電解銅めっき
De-smear/Electroless Copper Plating

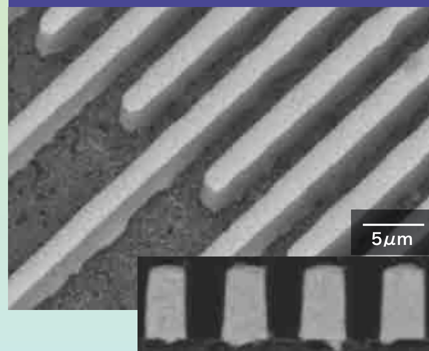
◎ナノ銀触媒を用いた無電解銅めっき
◎触媒残渣除去性に優れる
◎パターン外析出が極めて少ない

- Electroless copper plating using nano silver catalyst
- Excellent in catalyst residue removing performance
- Strongly reduce deposition outside patterns

L/S=5/5μm (MSAP)



L/S=2/2μm (SAP)

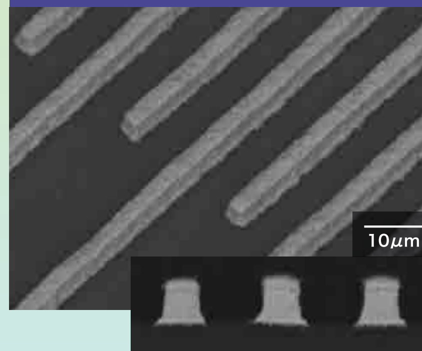


フラッシュエッチング
Flash Etching

◎ナノ銀触媒用フラッシュエッチング液(開発品)

- Flash etching solution for nano silver catalyst (Under development)

L/S=5/5μm (MSAP)



L/S=2/2μm (SAP)

5μm

無電解パラジウム/金めっき後

After electroless palladium/gold plating

L/S=2/2μm 達成

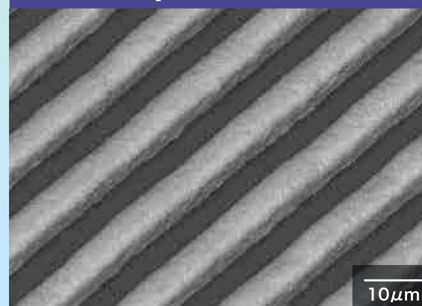
can be realized

最終表面処理
Final Surface Treatment

◎超微細配線に対応可能
◎被覆性良好
◎耐食性や耐熱性に優れる

- Applicable to ultra-fine patterning
- Great covering power
- High corrosion- and heat-resistance

L/S=5/5μm (MSAP)



無電解ニッケル/パラジウム/金めっき後（低ニッケル膜厚仕様）

After electroless nickel/palladium/gold plating (By thinner nickel plating)

L/S=5/5μm 達成

can be realized