KOKI
CHALLENGING NEW TECHNOLOGIES

eco+PLUS Lead Free SOLUTIONS you can TRUST

Low Ag solder paste

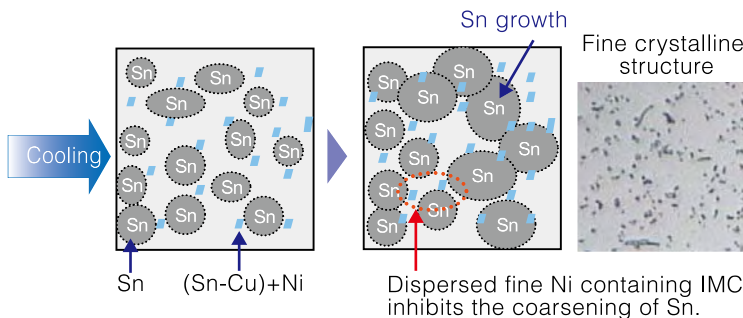
S1XIG series Sn 1.1Ag 0.7Cu +Ni

JPN PAT. #3296289

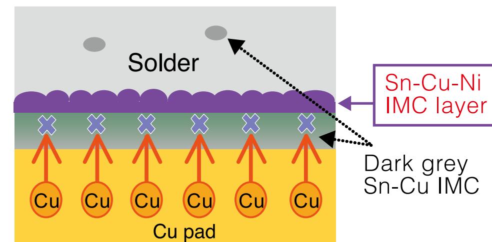
Develops original low Ag alloy with high joint reliability by adding Ni

Inhibits the growth of Sn grain & Sn-Cu type IMC by Sn-Cu-Ni type barrier layer

■ Solder coagulation process (image)



■ Inhibition of Cu diffusion



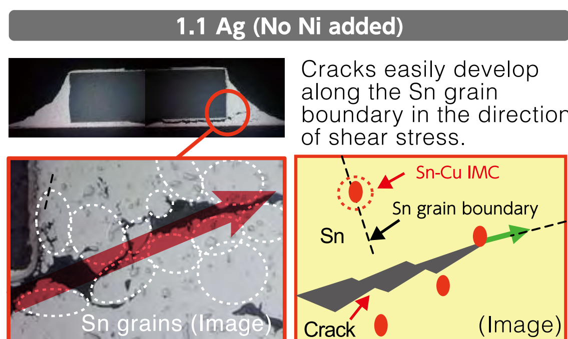
Ni is suspended into Sn-Cu IMC layer and inhibits the Cu diffusion from Cu pad.

Inhibits the development of cracks during thermal cycling

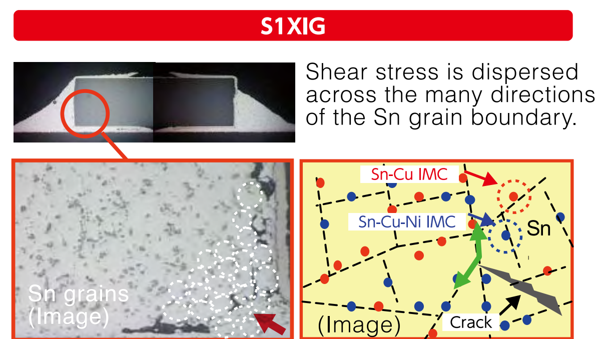
S1XIG maintains a fine crystalline structure of solder and forms more Sn grain boundary even after thermal cycling. This also inhibits the development of cracks during thermal cycling.

■ Cross sectional image after TC test (Conditions: -40⇔125°C 30min. each 1000 cycles Component: 6330 chip)

1.1 Ag (No Ni added)



S1XIG



Product specifications

Product name	S1XIG58-M500C	S1XIG58-M500-3
製品タイプ	Standard	Halogen free
合金組成 (%)	Sn 1.1Ag 0.7Cu ＋Ni	
融点 (℃)	217-224	
粉末粒度(μm)	20-38	
粘度 (Pa・s)	220	
フラックス含有量 (%)	11.5	
ハライド含有量 (%)	0	
フラックスタイプ	ROL0	

- 0.1Ag+α Solder alloy — Low Ag
- Anti-pillow defect
- Low voiding
- Fine pitch printing >0.4mm pitch >0.3mm dia. CSP
- Applicable for high pre-heating reflow
- Tack time >48hours — >48h
- No clean type — No-clean

Flux cored solder wire

Product name	S1XIG-70M
Alloy composition (%)	Sn 1.1Ag 0.7Cu +Ni
Melting point (°C)	217-224
Flux content (%)	3.2
Halide content (%)	0.09
Flux type	ROL1
Diameter (mm)	0.3 0.4 0.5 0.6 0.8 1.0 1.2 1.6

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