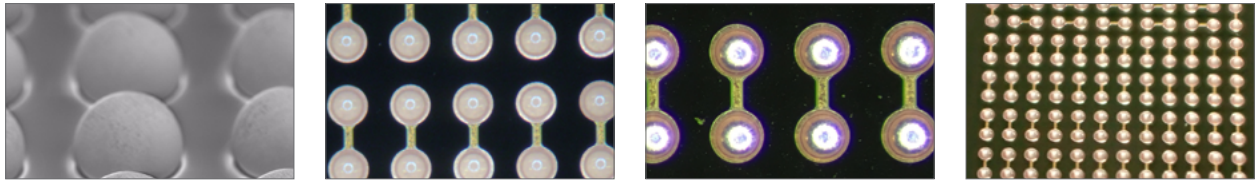


# ALPHA<sup>®</sup> Flux Paste

Flux Pastes for WL CSP / FO WLP, CSP and BGA Semiconductor Packaging

## DESIGNED FOR BALL ATTACH, LAB, MR AND TCB FLIP CHIP PROCESSING FOR BOTH SAC AND LTS ALLOYS

- High Tack with Excellent print and pin transfer consistency for HVM process capability across multiple packages and wafer designs
- Halide and Halogen free materials
- Excellent wetting and solderability with minimum voiding on various finishes (Cu, CuOSP, NiAu)
- Low temperature, easy to remove WS flux residues in standard DI washing (< 40 C)
- High Reliability Epoxy flux residues able to pass IPC SIR and Electromigration requirements



## FLUX PASTE PRODUCT LINE

| Product Name | Material Type | Deposition Method |       |     | Properties  |          |           |           | Component Type |
|--------------|---------------|-------------------|-------|-----|-------------|----------|-----------|-----------|----------------|
|              |               | Pin Transfer      | Print | Dip | Halide Free | Activity | Viscosity | Tackiness |                |
| NCX340       | No Clean      | o                 | o     | o   |             | Hi       | Med       | Hi        | BGA/FCCSP      |
| NCX-390      |               | o                 |       | o   | o           | Hi       | Med       | Hi        | BGA/FCCSP      |
| NCX402-M3    |               |                   |       |     | o           | o        | Hi        | Med       | Hi             |
| NCX PRL-507  | Epoxy         |                   | o     |     |             | Lo       | Hi        | Hi        | Wafer          |
| WS608        | Water Soluble | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/FCCSP      |
| WS600-MHV    |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/wafer      |
| WS698        |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/FCCSP      |
| WS9180-MHV   |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/wafer      |
| WSX-HF-HAHV  |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/wafer      |
| WS9160-M7    |               | o                 | o     | o   | o           | Hi       | Med       | Hi        | BGA/wafer      |
| WSX-9200     |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/FCCSP      |
| WS-630       |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/FCCSP      |
| WSX9284      |               | o                 | o     | o   | o           | Hi       | Hi        | Hi        | BGA/FCCSP      |



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