TAIYO AMERICA, INC.

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CERTIFICATE OF ANALYSIS and CONFORMANCE

This is to certify that the following product has been inspected prior to sale and shipment, and complies with Taiyo America's manufacturing specifications for this product.

This product meets all the requirements of IPC-SM-840E Classes H and T and Bellcore (Telecordia) GR-78-CORE and is UL recognized 94V-0 (File #E166421, UL Name: PSR-4000BN).

Lot# 9111937 Mfg. Date: 11-19-19 **PSR-4000BN (DG)** Warranty Ends: 11-19-20 **MANUFACTURING** PROPERTY **TEST METHOD SPECIFICATION** RESULT VISCOSITY Toki Sangyo RE100U Viscometer Before mixing: 325 - 375 ps 5 rpms @ 25°C After mixing: 175 - 225 ps ps THIXOTROPIC INDEX Toki Sangyo RE100U Viscometer 1.3 Viscosity ratio: 5 rpm / 50 rpm After mixing: 1.2 - 1.6 FINENESS OF GRIND TAI-0-0002 15 microns maximum microns VISUAL EXAMINATION Microscopic examination: 1. 1-mil drawdown of wet film No bubbles, pits, voids, Passed particles, color differences. 2. Wet film drawdown on No bubbles, pits, voids, **Passed** grind gauge particles, color differences. **SCREENABILITY** Visual inspection of screen Passed No surface defects, printed panel such as bubbles, pinholes, etc. **TACK-DRY** Hot air convection oven Passed Tack-free to the touch 80°C/30 minutes **IMAGING** 10 ORC HMW 680GW - 7 kW Stouffer 21 step: 9-13 500 mJ / cm² (clear on copper) Horizontal Developer - 1% Na2CO3 30°C (86°F) / 60 secs., 28 psi RESISTANCE TO 260°C (500°F) / 10 sec x 3 cycles **Passed** No discoloration, peeling, **SOLDERING** (*) Rosin-based flux or blistering SOLVENT Immersion in PM Acetate No swelling, softening, Passed RESISTANCE (*) 20°C / 30 mins. or blistering 94 PENCIL HARDNESS (*) TAI-0-0020 7H or greater **ADHESION** (*) TAI-0-0021 100/100 on copper Passed W.

(*) - Final cure for these tests was 60 minutes @ 150°C (302°F) in a convection oven

Verified I	By:	
At.	Q.C. SUPERNIS	on 11/21/19
Name,	Title,	Date