ROGERS CORPORATION

Processing Notes

XtremeSpeed™ RO1200™ Extremely Low Loss Digital Laminate Quick Reference Processing Guide

Material Description:	Woven glass reinforced copper clad ceramic filled PTFE composites
Storage:	Ambient
INNER LAYER PREPARATION	
Tooling:	Compatible with most round and slotted hole systems.
Surface Preparation for Photoresist Applications:	Chemical preparation
Photoresist Applications:	Standard film and liquid resists and procedures
DES Processing:	Standard processing. Thin cores may require leaders or frames.
Oxide Treatment:	Use procedures associated with oxide or oxide alternative of choice.
BONDING	
Final Preparation:	110°C to 125°C (230°F to 275°F) Pre-bake required.
Multilayer Adhesive System:	Compatible with RO1200™, bondply, and most traditional FR-4 prepreg types.
Multilayer Bond Cycle:	Follow recommendations for chosen bondply/prepreg system.
PTH AND OUTER LAYER/DOUBLE SIDED CIRCUIT PROCESSING	
Drilling:	Rigid and supportive entry/exit materials such as pressed phenolic. Use new drills. Controlled infeeds, speeds, and retract rates. Hit counts with new drill TBD.
Deburring:	Mechanical debur/scrub not recommended. Very light applied pressure if debur is required.
Hole Preparation:	Pressurized water or air purge of holes is okay. Sodium or plasma treatments required prior to metal deposition. Bake required after sodium treatment.
Metallization:	Electroless copper (low or regular dep rates preferred over heavy dep processes) or direct deposit processes
PTH PLATING AND OUTER LAYER IMAGING	
Final Surfaces:	Compatible with most final metals surfaces and OSP's. Preserve post-etch surface and bake cores prior to application of LPI.
Final Circuitization:	Rout & punch as required. Material support and sharp edges on cutting tools required through mechanical processes.

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