Hittite MICROWAVE CORPORATION

Engineer:	K. BENSON	Part Number:	000-00830
PCB Designer:	V. LY	Revision:	3
MECH Designer:	—	Board Name:	EVAL
Checker:	M. VuoNJ	Review Date:	
ECR Number:	QC121002	Charge Number:	2012618

Designer	Checker	N/A	Layout Verification	*No ERROR FOUND*
✔	✗	☐	Spacing and Connectivity	
✔	✗	☐	Impedance Control Rules	*11.5/9 9 13/20*
✔	✗	☐	Power/GND Planes	PWR current capacities/net verification
☐	✗	✔	VIA types	Blind/Back drilled/FILLED/HOT VIAS/ Mask for MTG vias
✔	✗	☐	GND VIAS	RF Shielding/Cover wall centers/antennas
✔	✗	☐	IC center GND slugs	Vias placed/Soldermask/Pastemask copper
☐	✗	✔	Printed Components	Layer 20/Soldermask/Keep outs
☐	—	✔	Unused pads	If removing-preserve via pads on start/end layers
✔	✗	☐	Soldermask	10mil solder dam/no silkscreen in solderable area
✔	✗	☐	Silkscreen	Polarities/Board #/HMC logo/Connector labels
☐	—	✔	Fiducials	Omit Ref Des from silkscreen/add to stencil
			Mechanical	
☐	—	✔	Cover Wall	Width/keep out/soldermask size
☐	—	✔	Cover & Mounting holes	Sizes and locations
☐	—	✔	Critical comp. locations	Connectors/Dimensions/Bottom layer clearances
☐	—	✔	Keep-out areas	Verify keep outs for components, VIAS, GND pour, etc
✔	✗	☐	Solder-mask openings	Screws-washers/Bottom around connectors
☐	—	✔	DXF Verification	
			Fabrication	
✔	✗	☐	Specify IPC standard	*6012 CL2*
✔	✗	☐	PCB Dimensions	Overall/cutouts/radius/angles/edge plating/coupons
✔	✗	☐	Layer stack-up detail	Via cross-section/Layers/Thickness as Critical Dimension
✔	✗	☐	Material, copper weight	Stack-up to match notes
✔	✗	☐	Finish plating req.	Multi-finish/Wire-bonding/OSP
✔	✗	☐	Special requirements	Impedance-line widths/Blind/Back drilled vias/Edge pltg
☐	—	✔	VIA fill requirements	Shown in cross-section detail and/or in notes
✔	6mil ✗ .010 VIA	☐	Minimum annular ring	VIAS and thru holes
✔	✗	☐	Hole Chart	Match drill files/Partials/Merge drill sizes/Tolerances
			Gerber, Drill Data	
✔	✗	☐	Artwork, output files	Appropriate labels & RS-274X output format)
☐	✗	✔	Printed Components	Proper size shapes and gaps/Metal-01 layer 20
✔	✗	☐	Soldermask	Oversize 8 mils/POSITIVE Image-must be clearly labeled
✔	✗	☐	Stencil/Paste-mask	Undersize 2 mils/omit printed components
✔	✗	☐	NCDrill	3 files for each type: .rep, .drl, .lst
✔	✗	☐	GC-Prevue file	Engineer check/Design Review
✔	✗	☐	ZIP file	Readme.txt/output files/fab pdf/IPC Netlist/aperture.rep/ASCII file/Component XY/GC-Prevue/copy of this checklist
			Assembly Dwg	
✔	✗	☐	Ref Des readable	
✔	✗	☐	Notes	
☐	✗	☐	Detail Views	