



PCB DESIGN CHECKLIST

Engineer:	Keith Benson	Part Number:	600-00541-00
PCB Designer:	Gerry Harrington	Revision:	1
MECH Designer:	N/A	Board Name:	PCB, EVAL, HMC1049LP5E
Checker:	Martin Lyons	Review Date:	8/22/12
ECR Number:	QC121026	Charge Number:	2012600

Designer	Checker	N/A	Layout Verification	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Spacing and Connectivity	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Impedance Control Rules	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Power/GND Planes	PWR current capacities/net verification
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VIA types	Blind/Back drilled/FILLED/HOT VIAS/ Mask for MTG vias
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GND VIAS	RF Shielding/Cover wall centers/antennas
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IC center GND slugs	Vias placed/Soldermask/Pastemask copper
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Printed Components	Layer 20/Soldermask/Keep outs
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Unused pads	If removing-preserve via pads on start/end layers
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Soldermask	10mil solder dam/no silkscreen in solderable area
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Silkscreen	Polarities/Board #/HMC logo/Connector labels
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fiducials	Omit Ref Des from silkscreen/add to stencil
Mechanical				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cover Wall	Width/keep out/soldermask size
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Cover & Mounting holes	Sizes and locations
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Critical comp. locations	Connectors/Dimensions/Bottom layer clearances
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Keep-out areas	Verify keep outs for components, VIAS, GND pour, etc
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Solder-mask openings	Screws-washers/Bottom around connectors
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DXF Verification	
Fabrication				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Specify IPC standard	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PCB Dimensions	Overall/cutouts/radius/angles/edge plating/coupons
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Layer stack-up detail	Via cross-section/Layers/Thickness as Critical Dimension
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Material, copper weight	Stack-up to match notes
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Finish plating req.	Multi-finish/Wire-bonding/OSP
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Special requirements	Impedance-line widths/Blind/Back drilled vias/Edge pltg
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VIA fill requirements	Shown in cross-section detail and/or in notes
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Minimum annular ring	VIAS and thru holes
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hole Chart	Match drill files/Partials/Merge drill sizes/Tolerances
Gerber, Drill Data				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Artwork, output files	Appropriate labels & RS-274X output format)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Printed Components	Proper size shapes and gaps/Metal-01 layer 20
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Soldermask	Oversize 8 mils/POSITIVE Image-must be clearly labeled
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Stencil/Paste-mask	Undersize 2 mils/omit printed components
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NCDrill	3 files for each type: .rep, .drl, .lst
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GC-Prevue file	Engineer check/Design Review
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ZIP file	Readme.txt/output files/fab pdf/IPC Netlist/aperture.rep/ASCII file/Component XY/GC-Prevue/copy of this checklist
Assembly Dwg				
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Ref Des readable	See CP121096
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Notes	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Detail Views	

ML2