



Connect Tech Inc.

PWB Specification CTIB-66154G

PWB Number:	CTIB-66154G
PWB Revision:	C
Date:	2016-10-11

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1 Table of Contents


1 Table of Contents	2
2 Revision History	2
3 PWB Construction	3
4 PWB Gerber Data	4
4.1 Layer Stack-up.....	4
4.2 Other Package Data	5
5 Special Processing	6
5.1 Special Drilling Holes Note	6
5.2 VSCORE Information	7

2 Revision History

PWB Revision	Date	Author(s)	Change
A	2016-01-12	MF	Mech Sample
B	2016-03-18	MF/PD	Prototype
C	2016-10-11	PD	Production Revision

3 PWB Construction

Note this board is a mechanical sample. No traces are present, no electrical testing is required.

Specification	Details	
Processing	All materials must be RoHS & Lead-free; including laminates, solder mask, & metals	
Laminate materials	Panasonic 1755V, Isola FR-370HR Tg >= 170 C Td >= 340 C Impedance Tolerances = DC to 6.5 GHz Flammability Rating: UL 94V-0 <i>NOTE: Laminates change will require approval from CTI before proceeding</i>	
Layers	12 copper, 2 solder mask, 2 silkscreen	
Controlled Impedance & Stackup	+/- 10% ; see stack-up for details NOTE: A controlled impedance certificate or report qualifying the produced PCB is required. Any changes to stack up require approval from CTI before proceeding.	
Finished thickness	62 mil	
Board Dimensions	6.380" x 4.325" (162.052mm x109.855mm)	
Panel Dimensions	6.380" x 5112.4" (167.132mm x129.855mm)	
Solder Mask	Color: Dark Blue Finish: Matte	
Silk Screen	Color: White Double sided NOTE : Do not process silk screen clearance over vias. Allow silk screen to flow over vias.	
Plating	Type: ENIG Thickness: As required by stackup, to meet impedance requirements	
Technology	Mixed surface mount and through-hole technology Minimum trace width: 0.004" Minimum spacing: 0.005" Minimum via: 0.008" hole, 0.018" pad	
Gold Fingers & Bevels	No	
Via-in-pad	Not Required	
Via Fill	Not Required	
Vscore	Yes	
Mil Route	No	
Quality	IPC 6012 Class II	
Compliance Markings		Appropriate "b" marking according to JSD-609 is required, as well as 94V-0 or applicable flame retardant ratings. NOTE: The image on the left is an example only, the "b" number will depend on actual PWB assembly processes that the PWB is subject to.
Corner Chamfers	As indicated in Gerber data (if any)	
X-Outs	N/A	

4 PWB Gerber Data

4.1 Layer Stack-up

#	Layer Name	Weight oz	Thickness	Controlled Impedance Targets (+/- 10%)					Gerber Data File Name
				Z	Type	Ref Plane	Width	Pitch (Gap)	
	Top Silkscreen								66154GCP.GTO
	Top Solder Mask								66154GCP.GTS
L1	Top			100	Diff	L2	4	9 (5)	66154GCP.GTL
	PP 2116 Must Be Used Here								
L2	Ground 1								66154GCP.GP1
	Any PP/Core Can be used Here								
L3	Internal 1			100	Diff	L2,L5	4	9 (5)	66154GCP.G1
	Any PP/Core Can be used Here								
L4	Internal 2			100	Diff	L2,L5	4	9 (5)	66154GCP.G2
	Any PP/Core Can be used Here								
L5	Ground 2								66154GCP.GP2
	Any PP/Core Can be used Here								
L6	Power 1								66154GCP.GP3
	Any PP/Core Can be used Here		** Ensure 3mil thickness here						
L7	Power 2								66154GCP.GP4
	Any PP/Core Can be used Here								
L8	Ground 3								66154GCP.GP5
	Any PP/Core Can be used Here								
L9	Internal 3			100	Diff	L8,L11	4	9 (5)	66154GCP.G3
	Any PP/Core Can be used Here								
L10	Internal 4			100	Diff	L8,L11	4	9 (5)	66154GCP.G4
	Any PP/Core Can be used Here								
L11	Ground 4								66154GCP.GP6
	PP 2116 Must Be Used Here								
L12	Bottom			100	Diff	L11	4	9 (5)	66154GCP.GBL
	Bot Solder Mask								66154GCP.GBS
	Bot Silkscreen								66154GCP.GBO
	TOTAL								

Notes

- [1] **Adjust core, prepreg, and copper thickness as necessary.** Copper can be either 0.5 oz or 1.0 oz
[2] All dimensions are in mils; unless otherwise listed.

4.2 Other Package Data

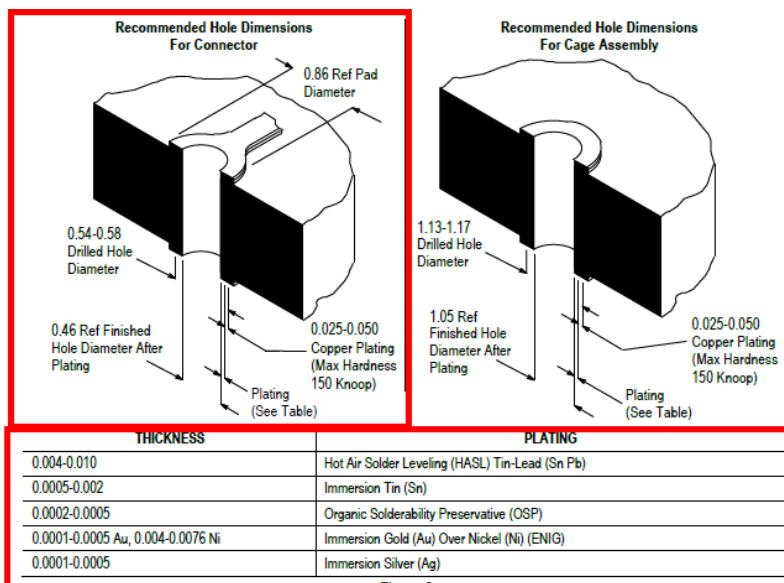
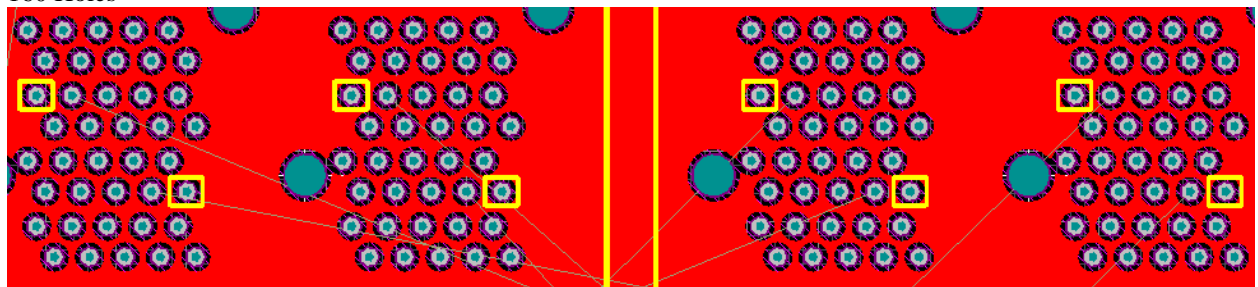
Description	File
V-score directions	66154GCP.GM4
Board Outline	66154GCP.GM16
Drilling data	66154GCP***.TXT 66154GCP.DRL
Routing / Milling data	N/A
Solder Paste (top)	66154GCP.GTP
Solder Paste (bottom)	66154GCP.GBP
Gerber data summary Report	66154GCP.REP
Drill summary Report	66154GCP.DRR
File summary Report	66154GCP.EXTREP

5 Special Processing

5.1 Special Drilling Holes Note

The drill holes listed for the following press-fit connector locations listed below require tight tolerances on both the drill and finished hole size. Though the tolerance is on the finished-hole size, please use a drill as close as possible to the numbers below.

160 Holes



5.2 VSCORE Information

Please VSCORE to a remaining thickness of 25mil

