



FABRICATION NOTES

Design Features

Number of Layers: 4

Smallest Via Drill/Pad: See drill table

Impedance Control: YES

Gold Fingers: NO

Silkscreen Color (Top & Bottom): WHITE

Soldermask Color (Top & Bottom):

Renesas Blue

CMYK 73/75/0/38

RGB 40 40 157

#2A 28 9D HEX

Matte Finish

Materials and Ratings

Core Material: FR4

PAD Finish: ENIG

Finished Board Thickness: See Chart

Finished outer layer Cu min thickness: See Chart

Copper thickness - inner layers: See Chart

ROHS Required: YES

UL94V Rating: UL94V-0

IPC-A-6011/IPC-A-6012 Class: 2

Tg (C min): 170

Td (C min): 330

Inspect per IPC-A-600

Process and Panelization

Inner Thieving/Balancing OK? YES

Outer Thieving/Balancing OK? NO

Electrical 100% Test Requested: YES

Panelization Requested: YES

Panelization Method: TAB-ROUTE w/Rails

Keepaway: 2.5mm

Keepaway:

Board Manufacturing Markings (Board Bottom Side)

Board Lot and QC Stamp

UL94V-0

ROHS

Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
	Surface Material			Solder Mask	GTS
CF-004	Top Solder	0.03mm(1mil)	SM-003		
	Top L1	0.04mm(1mil)		Signal	GTL
Prepreg		0.10mm(4mil)	PP-013	Dielectric	
CF-004	GND L2	0.04mm(1mil)		Signal	G1
Core		0.99mm(39mil)	Core-042	Dielectric	
CF-004	PWR L3	0.04mm(1mil)		Signal	G2
Prepreg		0.10mm(4mil)	PP-013	Dielectric	
CF-004	Bottom Layer	0.04mm(1mil)		Signal	GBL
Surface Material	Bottom Solder	0.03mm(1mil)	SM-003	Solder Mask	GBS
	Bottom Overlay			Legend	GBO


Total thickness: 1.37mm(54mil)

ENGINEER: MRM	<div>RENESAS</div> <div>www.renesas.com</div>	
PCB DESIGNER: Renesas		
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FILE NAME: FAB_DWG.PCBDwf	DOCUMENT TITLE: Fabrication Drawing, 2 of 3	DOC REV: B



Transmission Line Structure Table

Impedance Id	Transmission Line	Target Impedance	Trace layer	Wide Trace Width	Narrow Trace Width	Gap	Reference layers	Clearance	Target Tolerance
1	Coated Microstrip	50	Top L1	0.152mm	0.152mm		GND L2	0.127mm	10%
2	Edge-Coupled Coated Microstrip	100	Top L1	0.127mm	0.127mm	0.305mm	GND L2	0.127mm	10%
3	Edge-Coupled Coated Microstrip	90	Top L1	0.140mm	0.140mm	0.178mm	GND L2	0.127mm	10%
4	Coated Microstrip	50	Bottom Layer	0.152mm	0.152mm		PWR L3	0.127mm	10%
5	Edge-Coupled Coated Microstrip	100	Bottom Layer	0.127mm	0.127mm	0.305mm	PWR L3	0.127mm	10%
6	Edge-Coupled Coated Microstrip	90	Bottom Layer	0.140mm	0.140mm	0.178mm	PWR L3	0.127mm	10%

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