

**Request****PCB specification**

Date 12.12.2018

Projectname: hear\_it

PCB-No.: D015582

Rev.: 2

**General requirements**

IPC-A-600 G	Class II
RoHS compatible	Yes
UL-certification	Yes
Manufacturer logo	Yes
Date code	Yes
E-test	Yes
Impedance check	No
First sample test report	No
Grinding surface pattern	No
Position UL-No.and Logo	free
Position manufacturer logo and Datecode	free
Filled system	No

**Drill- and milling parameter**

Smallest drill diameter (µm)	300
Number of drills per PCB (piece)	141
Long holes	No
Edge contact	No
Backdrill	No
Blind via	No
Blind via / Drilling planes	
Buried via	No
Buried Via / drilling planes	
Microfill blind via	No
Plugging buried via	No
Milling tolerance, cut	Standard
level milling	No

**Production requirements**

PCB-type:		rigid
PCB-dimension:	+/- 0,2 mm	25 x 45
Panel:		No
Panel dimension:	+/- 0,2 mm	
Piece per panel:		1
Contour:		milled
PCB-thickness:	+/- 10%	1,65
Number of layers:		4
Inner layer copper incl. galv. Cu:	(µm)	35
External layer copper incl. galv. Cu:	(µm)	40-45
Smallest track width	(µm)	200
Smallest spacing width	(µm)	200
Material properties of surface:		chem. NI/AU
Connectorgold:		No
Solder resist:		green
Silkscreen		Top/Bottom
Colour of silkscreen:		white
partial via print:		No
Carbon print:		No
Stripping paint:		No

**Base material (on the basis of standard IPC-4101)**

Material:	min. requirements		FR 4
TD:	>325, >345	° Celsius	>325
TG:		° Celsius	135
CTE Z axis (before TG, after TG)	ppm/k		<53, <270
Permittivity (er)			3,7 - 4,0
T-260 / T-288	minutes		>60 / >15

**Purchase**

Invoice address:	Renesas Electronics Europe GmbH
	Arcadiastr. 10
	40472 Düsseldorf

Delivery address:	Renesas Electronics Europe GmbH
	Arcadiastr. 10
	40472 Düsseldorf

Single piece:	X
Panel piece:	
Delivery time:(working days)	15
Date of delivery:	xx.xx.2017

**Ordering:**

**Contact:** Kwadwo Kensah  
**Email:** [kwadwo.kensah@renesas.com](mailto:kwadwo.kensah@renesas.com)  
**Phone:** 021165031951  
**Fax:** 021165036951

**Technical:**

**Contact Person:** Wilfried Rauser  
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**Phone:** 021165031027  
**Fax:** 021165031453

**Characteristics:**

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**Contact**  
**Email:** Wilfried Rauser  
wilfried.rauser@renesas.com  
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	Subclass Name	Type	Thickness (MM)
1		SURFACE	
2		DIELECTRIC	0.025
3	TOP	CONDUCTOR	0.045
4		DIELECTRIC	0.22
5	02_LAYER_GND	PLANE	0.035
6		DIELECTRIC	1
7	03_LAYER_PWR	PLANE	0.035
8		DIELECTRIC	0.22
9	BOTTOM	CONDUCTOR	0.045
10		DIELECTRIC	0.025
11		SURFACE	

**Total Thickness:** 1.65 MM

**Layer Type:** ALL

**Material:** ALL