

Oak Sensor 10V

V1.2.001

PCB Production Instructions

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1. Overview, Statistics

1.1. PCB

PCB type	rigid
Insulator material	FR4
Board Size Extents	48 X 48 mm (final size)
Layer Count	2
Board thickness	1.6mm
Copper thickness	35µm
Hole Count	106
Solder mask	on both sides
Silkscreen	no
Surface	HAL Pb-free

1.2. Statistics

Through Holes	100
Minimum line width	0.15mm
Smallest drill diameter	0.3mm
Smallest annular ring	0.15mm
Minimum spacing	0.15mm

1.3. Assembly

Assembly sides:	SMD and THT components on top side
SMD component count	57
THT component count	4
Pin Count	236



2. Layer Stackup

2.1. Sequence of the Gerber Files

Please stack the layers in the order given below:

File name	Description	Format
SoldermaskTop.gdo	<i>Solder mask (component side)</i>	RS274-X
EtchLayer1Top.gdo	top layer / component side	
EtchLayer2Bottom.gdo	bottom layer / solder side	RS274-X
SoldermaskBottom.gdo	<i>Solder mask (solder side)</i>	

2.2. Additional Files

SolderPasteTop.gdo	Solder Paste (component side)	RS274-X
Mechanics.gdo	Mechanical dimensions	RS274-X
ThruHoleNonPlated.ncd	Drill coordinates (plated)	NC drill
ThruHolePlated.ncd	Drill coordinates (non-plated)	NC drill
ContourPlated.ncd	Milling coordinates (non-plated)	NC drill

2.3. Layer thickness

The thickness is not critical at all. So please go for the common standard thickness of 1.6mm+/- 0.15mm

Proposed thicknesses:

	Description	Material	Thickness
	Top Solder Mask		
1	Top Layer	Cu	35u
		Core	1530u
4	Bottom Layer	Cu	35u
	Bottom Solder Mask		
Overall thickness			1.6mm



Revision History

Date	File Name	Initial	Changes
2011-09-23	Oak 10V V1_2 manufacturing instructions 2011-09-23.	dus	Initial release
2011-12-14	051512_Oak_10V_V1_2_001_PCB_Production_Instructions_2011-12-14	ub	Rename File, correct "Layer thickness"

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