

HQDFM Design for Manufacture(DFM) Report

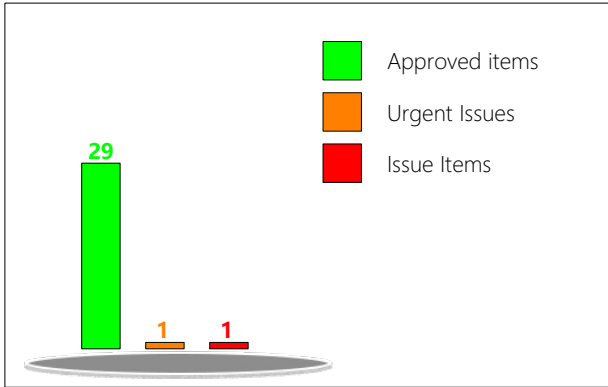
File name: 2024-07-13

Time: 2024-07-13 Layer count:2

PCB Thickness: 1.60

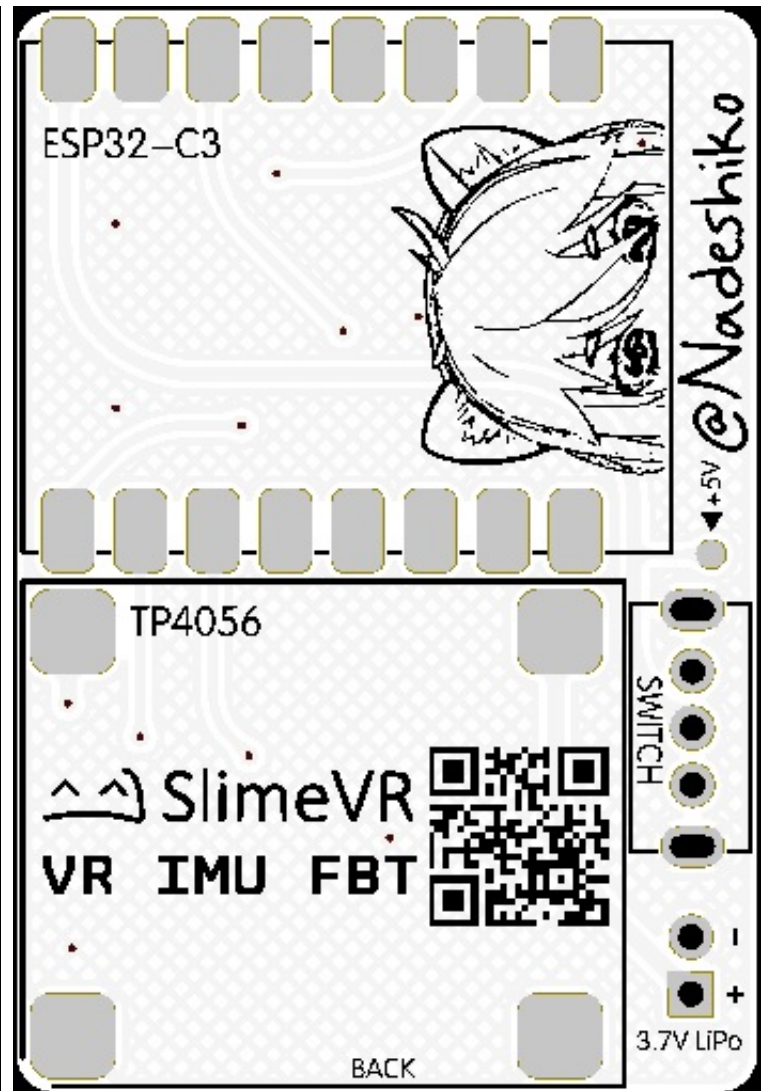
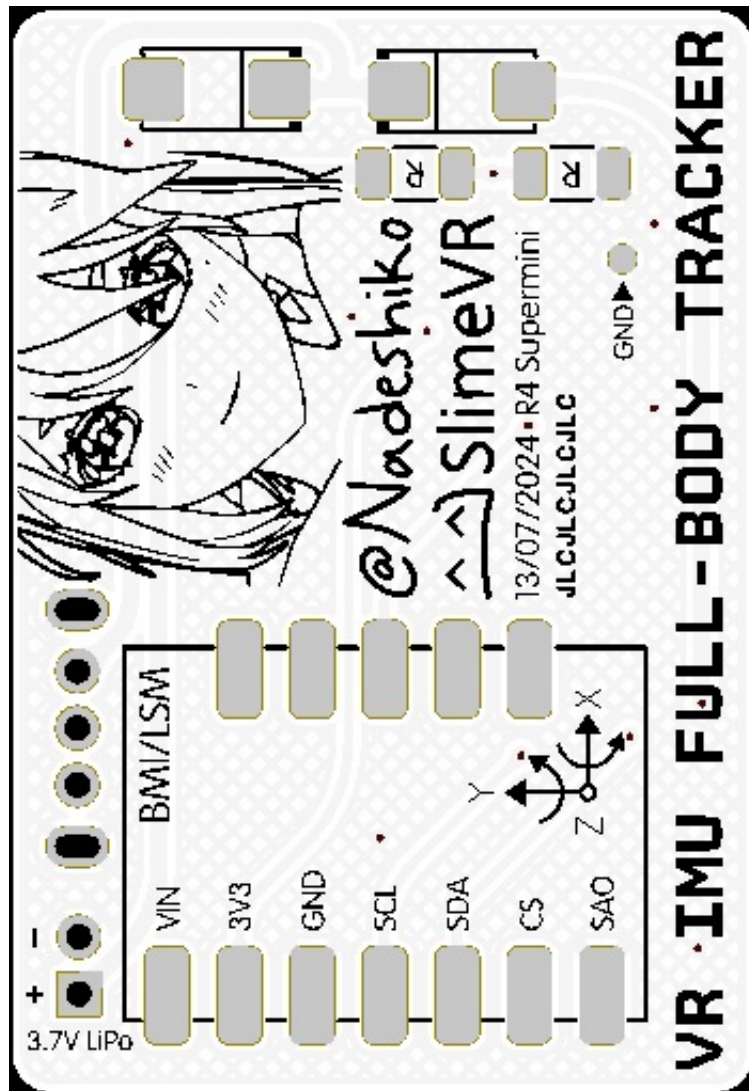
Quantity: 5

mm



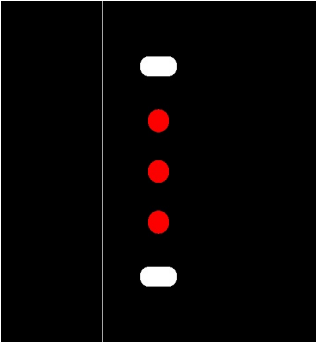
Basic Board Specs	Trace Width/Spacing	10.00/10.00mil+
	Milling Density	132.8730m/m ²
	Surface Finish Area	27.51%
	Test Point Count	49

The file size is small, which can affect the surface mount assembly process. It is recommended to have a size larger than 7*7cm. You can optimize the size by adding a process edge or increasing the panelization.



Type	Category	No. of Checks	Result
PCB Trace Analysis	Open/Shorts (IPC)	1	Fail
	Signal Integrity	4	Pass
	Smallest Trace Width	1	Pass 2
	Smallest Trace Spacing	3	Pass
	SMD Pad Spacing	1	Pass
	Pad Size	3	Pass 2
	Hatched Copper Pour	2	Pass 2
	Annular Ring Size	2	Pass 2
	Drill to Copper	5	Pass 37
	Copper-to-Board Edge	2	Pass 37
	Holes on SMD Pads	4	Pass
PCB Drilling Analysis	Drill Diameter	8	Pass 12 , Fail 1
	Drill Spacing	4	Pass
	Drill to Board Edge	4	Pass
	Drill Hole Density	1	Pass
	Special Drill Holes	2	Pass
	Drill Hole Errors	3	Pass
PCB Solder Mask Analysis	Solder Mask Dam	2	Pass
	Missing SMask Opening	1	Pass
	Solder Paste Area	1	Pass
PCB Silk Analysis	Silkscreen Spacing	1	Pass

PCBA Component Analysis	Component Spacing	1	Fail
	Comp.-to-Board-Edge	3	Fail
	Componet Silkscreen Spacing	0	Fail
	Pad Count Mismatch	2	Fail
	Designator Length	0	Fail
	Double-sided Components	1	Pass
	ComponentClearanceAnalysis	1	Pass
PCBA Pin Analysis	Pin-to-SMD Pad	7	Fail
	Through-hole Pins	9	Fail
	Pressfit Pins	4	Fail
PCBA Pad Analysis	Chip Pad	60	Fail
	Pad-Trace Connections	4	Pass 37
PCBA Fiducial Analysis	Fiducial Count	1	Fail
	Fiducial Analysis	3	Pass

ID	Check	Limits	Value	Issue	Image	Position	Qty	Level
1	Drill Diameter_Slot Aspect Ratio	12,10,8	0.30 mm	Slots with aspect ratio of 2.00 were detected in your design. This could increase the risk of incomplete drilling of the slot, which decrease manufacturing efficiency and yield, and affect the reliability of the boards. The ratio should be increased to at least 2:1		6.30,11.48	1	Warning