

BLDC motor controller PCB Document

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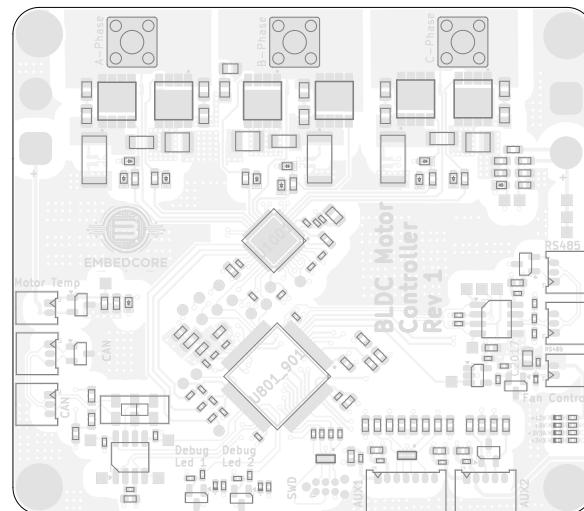
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FABRICATION NOTES (UNLESS OTHERWISE SPECIFIED)

- 1) OUTLINE DEFINED IN SEPARATE GERBER FILE WITH "Edge_Cuts.GBR" SUFFIX.
DIMENSIONS OF CIRCUMSIZED RECTANGLE SHOWN ON THIS DWG FOR REF ONLY.
- 2) SEE SEPARATE DRILL FILES WITH ".DRL" SUFFIX FOR HOLE LOCATIONS.
SELECTED HOLE LOCATIONS SHOWN ON THIS DWG FOR REF ONLY.
- 3) IMPEDANCE CONTROL REQUIRED.
Microstrip 100-Ohm Differential (L1 ref. L2)
0.2032mm width, 0.28mm spacing
- 4) CONFIRM TRACE WIDTHS AND SPACINGS.
- 5) DESIGN GEOMETRY MINIMUM FEATURE SIZES:

TRACE WIDTH	0.20 mm
TRACE TO TRACE	0.20 mm
MIN. HOLE (PTH)	0.25 mm
MIN. HOLE (NPTH)	0.70 mm
ANNULLAR RING	0.15 mm
COPPER TO HOLE	0.254 mm
COPPER TO EDGE	0.25 mm
HOLE TO HOLE	0.254 mm



Layer Stack Legend

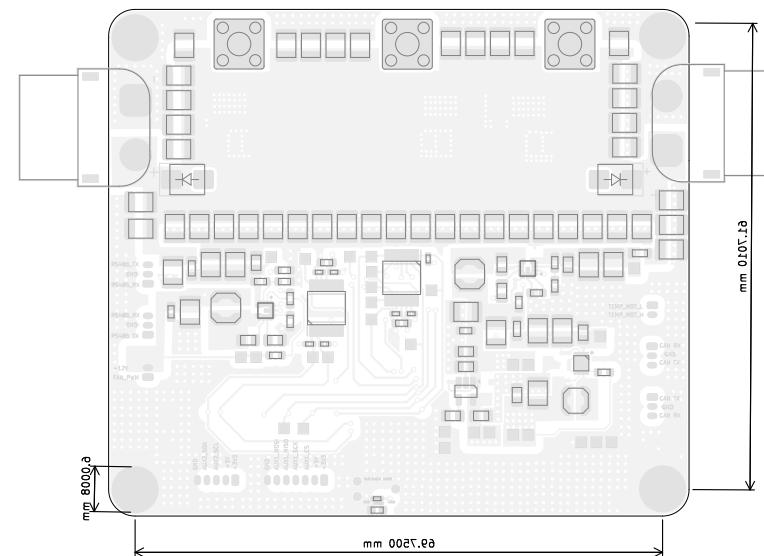
Material	Layer	Thickness	Dielectric Material	Type	Gerber
	F.Paste			Paste Mask	GBR
	F.Silkscreen			Legend	GBR
	F.Mask		Solder Resist	Solder Mask	GBR
Copper	L1 (Sig. PWR)	0.07mm (2oz)		Signal	GBR
Prepreg		0.18mm	FR-4	Dielectric	
Copper	L2 (GND)	0.035mm (1oz)		Internal Plane	GBR
Core		0.4mm	FR-4	Dielectric	
Copper	L3 (PWR)	0.035mm (1oz)		Signal	GBR
Prepreg		0.18mm	FR-4	Dielectric	
Copper	L4 (Sig)	0.035mm (1oz)		Signal	GBR
Core		0.4mm	FR-4	Dielectric	
Copper	L5 (GND)	0.035mm (1oz)		Internal Plane	GBR
Prepreg		0.18mm	FR-4	Dielectric	
Copper	L6 (Sig. PWR)	0.07mm (2oz)	Solder Resist	Solder Mask	GBR
	B.Mask			Legend	GBR
	B.Silkscreen			Paste Mask	GBR
	B.Paste				

Total thickness: 1.62mm

Note: external layer thicknesses are specified after plating.

	Comments:	Company:		Variant: CHECKED
		EmbedCore		
	Board Name: BLDC motor controller			Project Name: BLDC motor controller
	Sheet Title: PCB Document	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd	Date: 2024-04-13 Revision: 1.1
	Sheet Path:		Reviewer: Nagy Richárd	Size: A4 Sheet: 1 of 1

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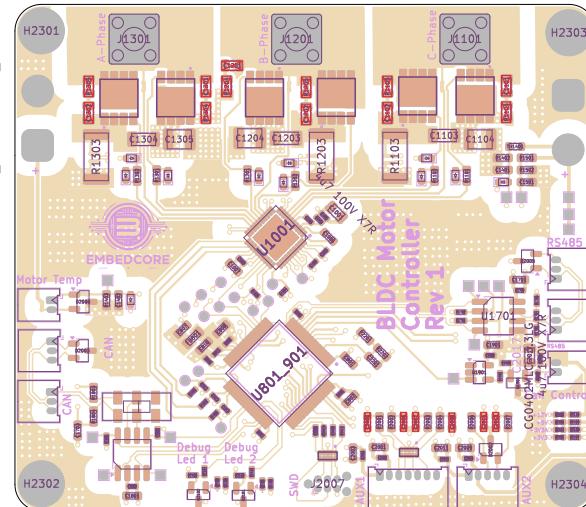
Top Assembly (Scale 1:1)

Components

Type	Front Side	Back Side	Total
THT	12	0	12
SMD	136	104	240
Total	148	104	252

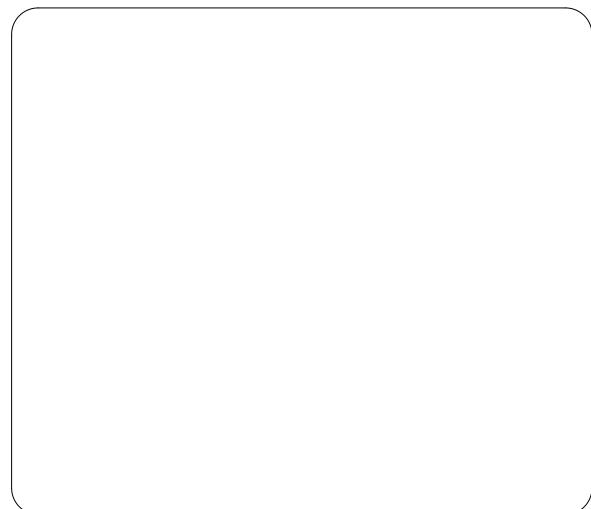
ASSEMBLY NOTES (UNLESS OTHERWISE SPECIFIED)

- 1) DO NOT POPULATE PARTS ARE MARKED WITH A RED CROSS.
- 2) DO NOT POPULATE PARTS ARE NOT PRESENT IN THE BOM.
- 3) IF CONFLICTING INFORMATION IS FOUND BETWEEN THE ASSEMBLY FILE AND BOM, BOM SHOULD BE USED AS THE MAIN SOURCE.

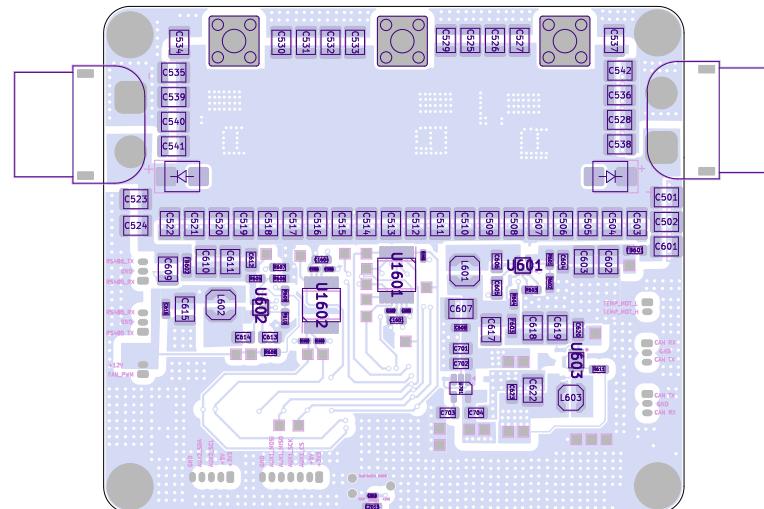


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Bottom Assembly (Scale 1:1)



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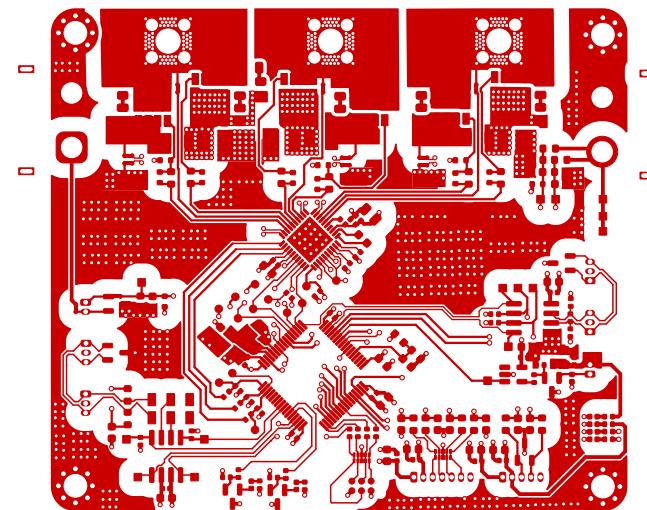
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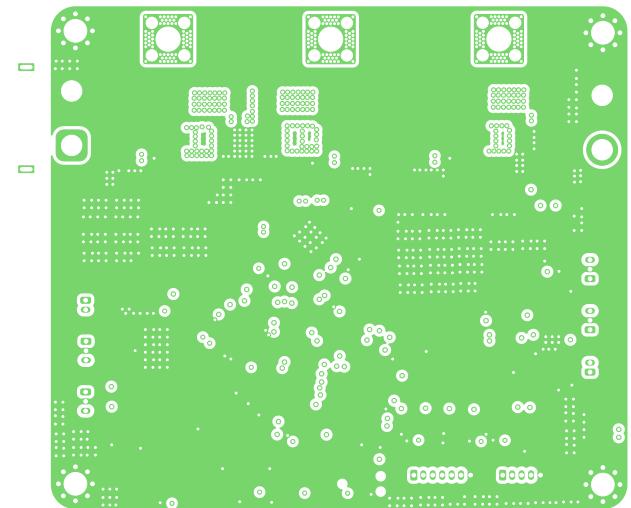
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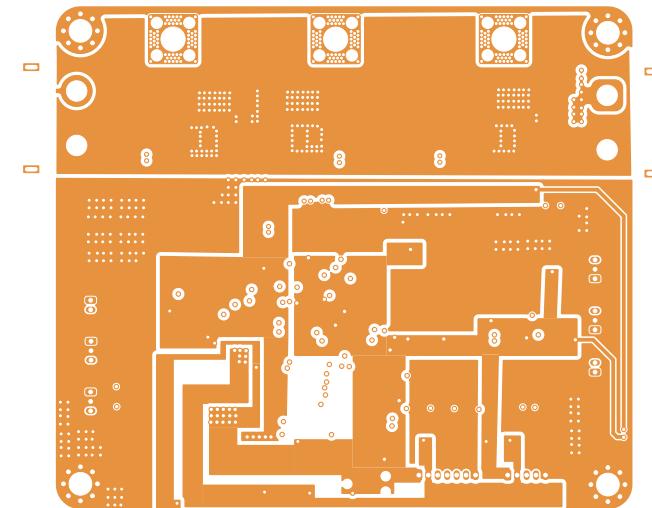
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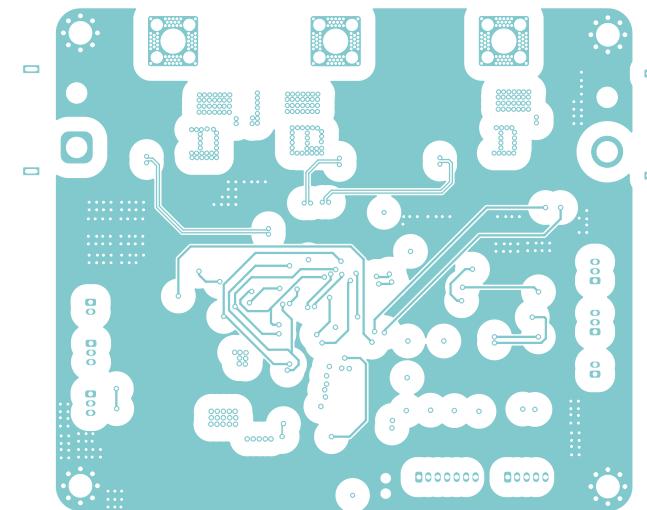
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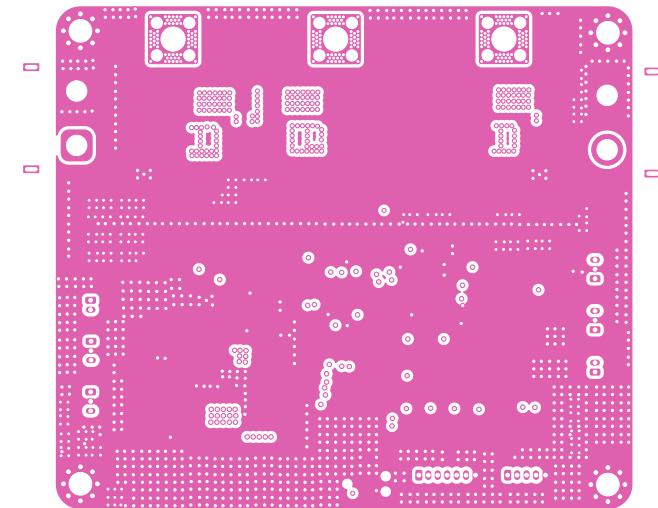
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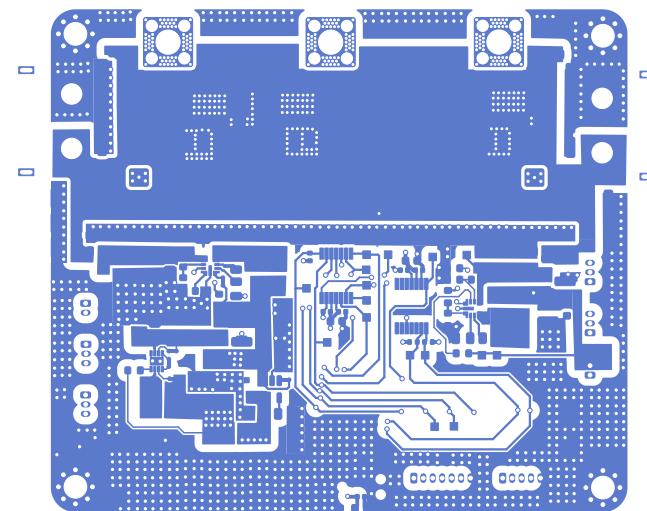
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