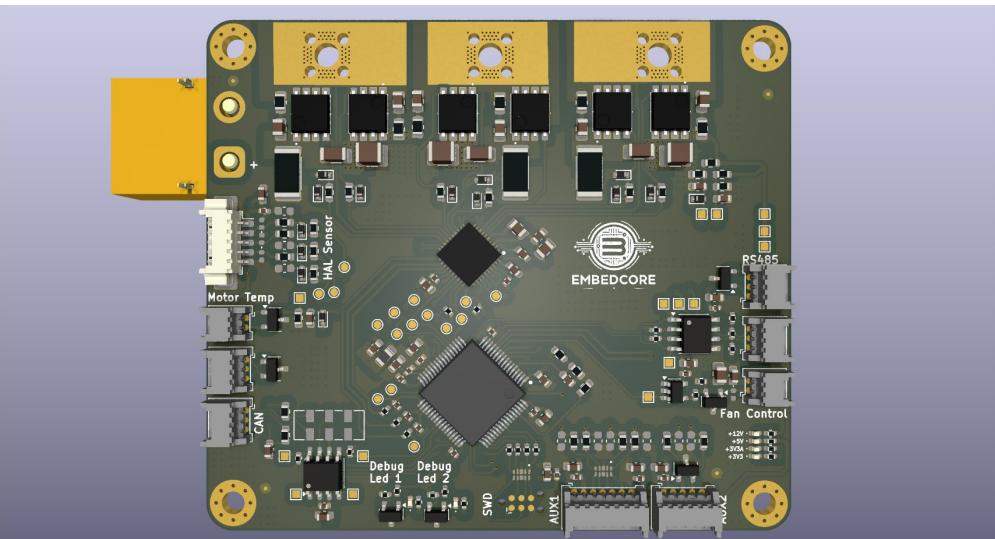
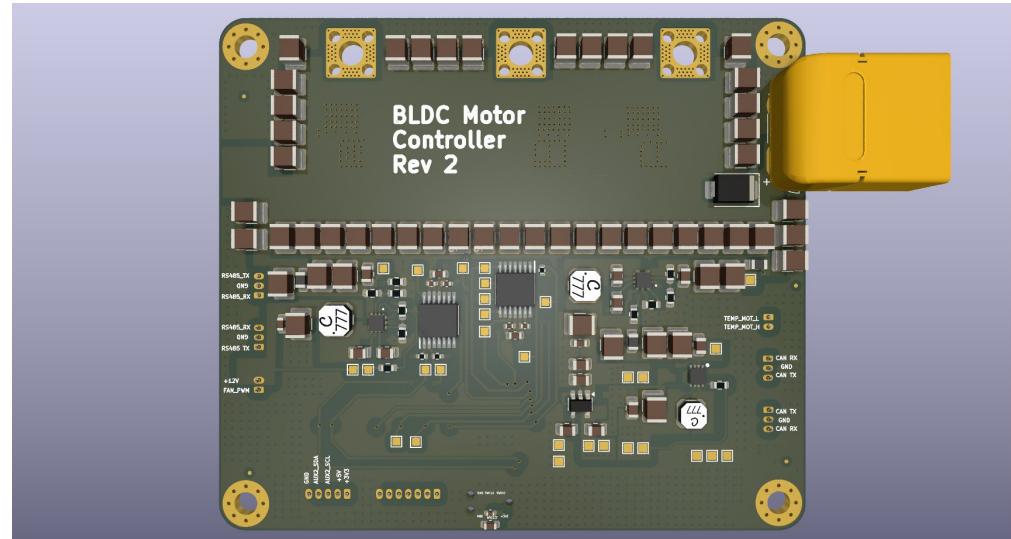


# BLDC motor controller PCB Document

A



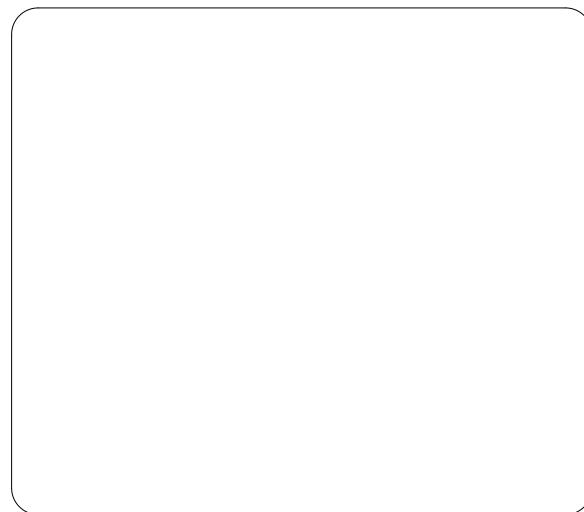
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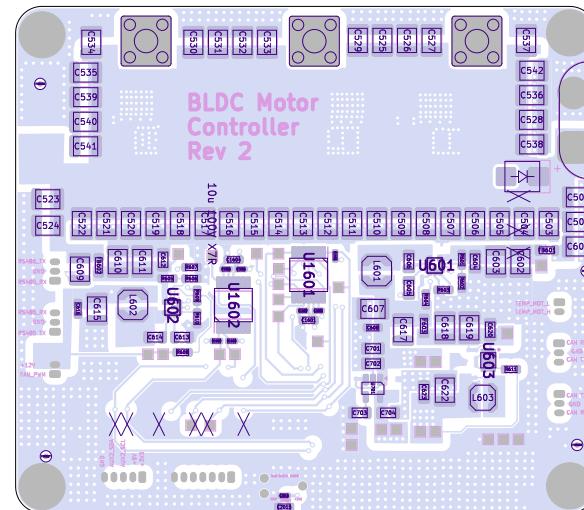
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	Comments: Board2Pdf: TITLE PAGE - Page 1/11	Company: EmbedCore	Variant: CHECKED
	Board Name: <b>BLDC motor controller</b>		Project Name: <b>BLDC motor controller</b>
	Sheet Title: PCB Document	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd
	Sheet Path: TITLE PAGE	Reviewer: Nagy Richárd	Date: 2024-04-13
			Revision: 1.1
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# BLDC motor controller PCB Document



**Bottom Assembly (Scale 1:1)**



	Comments: Board2Pdf: ASSEMBLY_BOT - Page 2/1	Company: EmbedCore  Board Name: <b>BLDC motor controller</b>	Variant: CHECKED
	Sheet Title: PCB Document	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd  Project Name: <b>BLDC motor controller</b>
	Sheet Path: ASSEMBLY_BOT	Reviewer: Nagy Richárd	Date: 2024-04-13 Revision: 1.1

# BLDC motor controller PCB Document

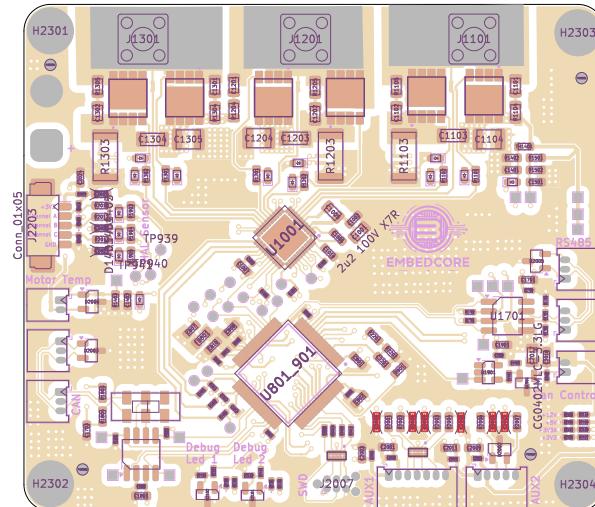
**Top Assembly (Scale 1:1)**

## Components

Type	Front Side	Back Side	Total
THT	11	1	12
SMD	182	107	289
Total	193	106	301

### 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.



	Comments: Board2Pdf: ASSEMBLY_TOP - Page 3/1	Company: EmbedCore	Variant: CHECKED
	<b>BLDC motor controller</b>		
	Sheet Title: PCB Document	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd
	Sheet Path: ASSEMBLY_TOP	Reviewer: Nagy Richárd	Date: 2024-04-13
		Size: <b>A4</b>	Sheet: of <b>1</b>

# BLDC motor controller PCB Document

A

B

C

D

A

B

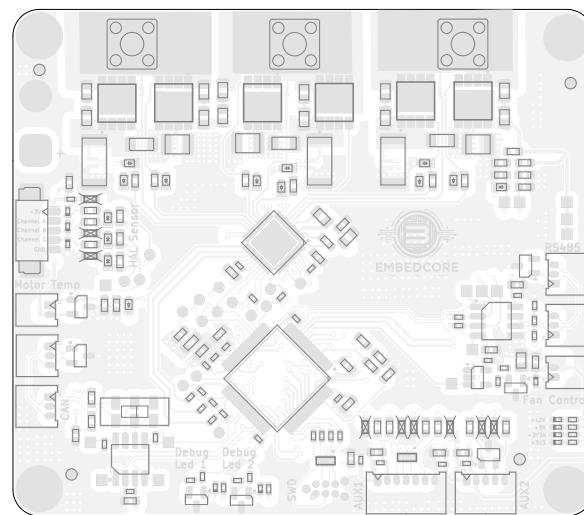
C

D

## 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

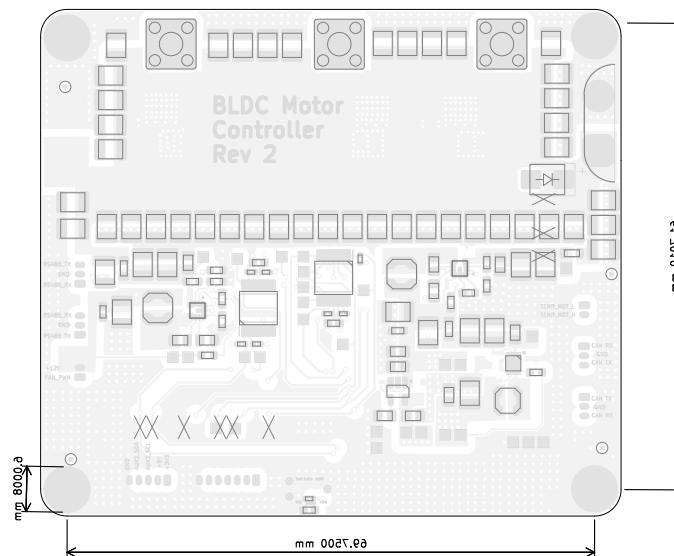
Material	Layer	Thickness	Dielectric Material	Type	Gerber
	F.Paste			Paste Mask	GBR
	F.Silkscreen			Legend	GBR
	F.Mask		Solder Resist	Solder Mask	GBR
Copper	L1 (Sig. PWR)	0.07mm (2oz)		Signal	GBR
Prepreg		0.18mm	FR-4	Dielectric	
Copper	L2 (GND)	0.035mm (1oz)		Internal Plane	GBR
Core		0.4mm	FR-4	Dielectric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

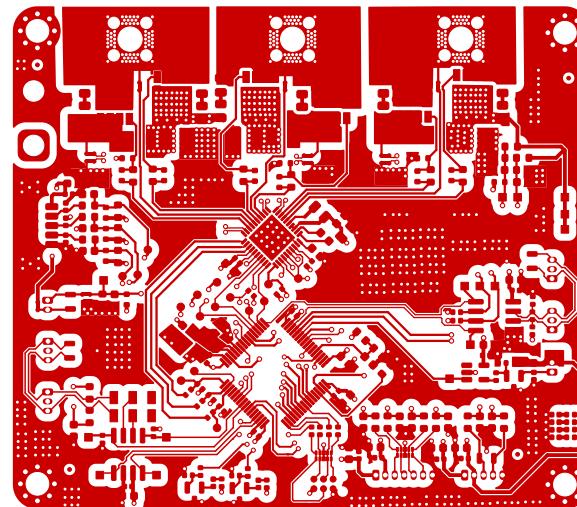
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	Board Name:  <b>BLDC motor controller</b>		Project Name:  <b>BLDC motor controller</b>	
	Sheet Title:  PCB Document		File Name:  BLDC motor controller.kicad_pcb	Designer:  Nagy Richárd
	Sheet Path:  FABRICATION_TOP		Reviewer:  Nagy Richárd	Date:  2024-04-13
			Size:  <b>A4</b>	Sheet:  of <b>1</b>

# BLDC motor controller PCB Document



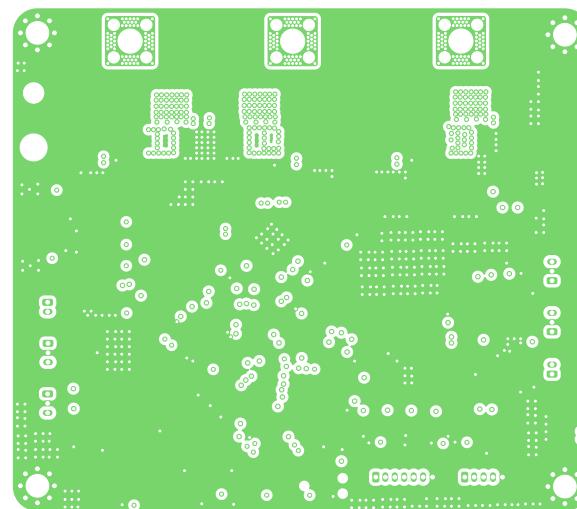
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	Sheet Title: PCB Document	Project Name: <b>BLDC motor controller</b>	
	Sheet Path: FABRICATION_BOT	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd
		Date: 2024-04-13	Revision: 1.1
		Reviewer: Nagy Richárd	Size: <b>A4</b>
			Sheet: <b>of 1</b>

# BLDC motor controller PCB Document



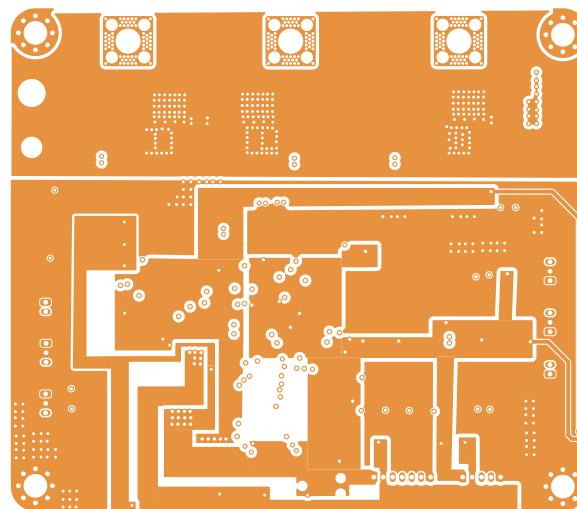
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	Sheet Title: PCB Document	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd
	Sheet Path: L1	Reviewer: Nagy Richárd	Date: 2024-04-13
		Size: <b>A4</b>	Sheet: <b>of 1</b>

# BLDC motor controller PCB Document



	Comments: Board2Pdf: L2 - Page 7/11	Company: <b>EmbedCore</b>	Variant: <b>CHECKED</b>
	Sheet Title: <b>PCB Document</b>	Board Name: <b>BLDC motor controller</b>	
	Sheet Path: <b>L2</b>	File Name: <b>BLDC motor controller.kicad_pcb</b>	Designer: <b>Nagy Richárd</b>
		Reviewer: <b>Nagy Richárd</b>	Date: <b>2024-04-13</b> Revision: <b>1.1</b>

# BLDC motor controller PCB Document



A

A

B

B

C

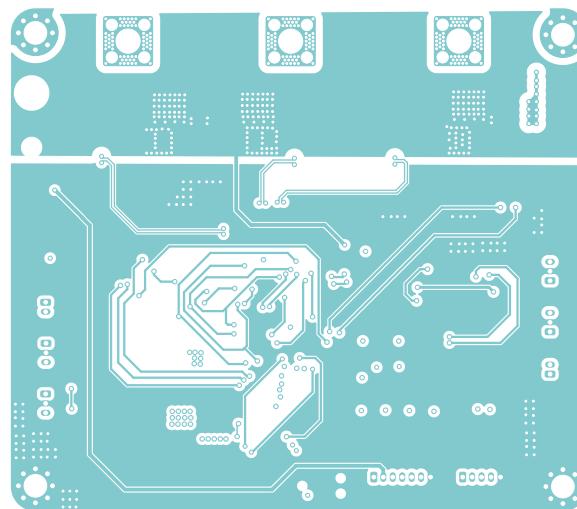
C

D

D

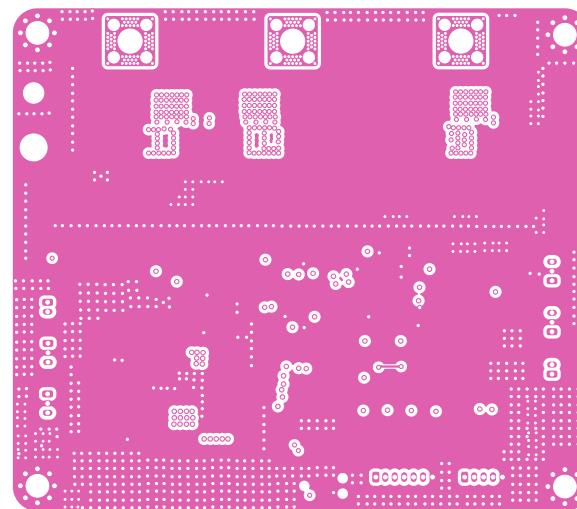
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	Board Name:  <b>BLDC motor controller</b>		Project Name:  <b>BLDC motor controller</b>
	Sheet Title:  PCB Document	File Name:  BLDC motor controller.kicad_pcb	Designer:  Nagy Richárd
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		Size:  <b>A4</b>	Sheet:  <b>of 1</b>

# BLDC motor controller PCB Document



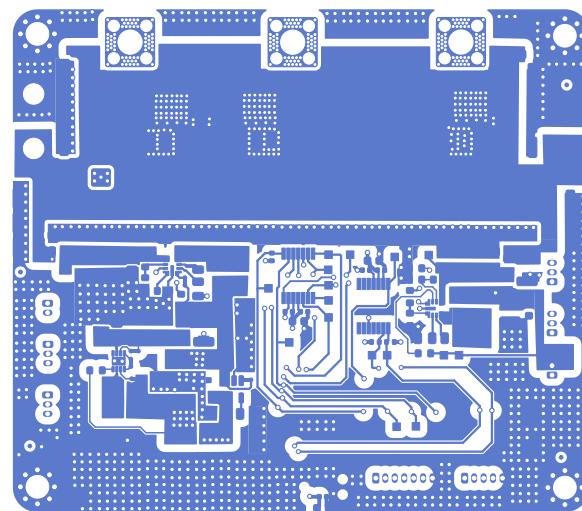
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		Reviewer: <b>Nagy Richárd</b>	Date: <b>2024-04-13</b> Revision: <b>1.1</b>

# BLDC motor controller PCB Document



	Comments:  Board2Pdf: L5 - Page 10/11	Company:  EmbedCore	Variant:  CHECKED
	Sheet Title:  PCB Document	Board Name:  <b>BLDC motor controller</b>	
	Sheet Path:  L5	File Name:  BLDC motor controller.kicad_pcb	Designer:  Nagy Richárd
		Reviewer:  Nagy Richárd	Date:  2024-04-13
			Revision:  1.1
		Size:  <b>A4</b>	Sheet:  of <b>1</b>

# BLDC motor controller PCB Document



	Comments: Board2Pdf: L6 - Page 11/11	Company: <b>EmbedCore</b>	Variant: <b>CHECKED</b>
	Board Name: <b>BLDC motor controller</b>		Project Name: <b>BLDC motor controller</b>
	Sheet Title: PCB Document	File Name: BLDC motor controller.kicad_pcb	Designer: Nagy Richárd
	Sheet Path: L6	Reviewer: Nagy Richárd	Date: 2024-04-13
		Size: <b>A4</b>	Sheet: <b>of 1</b>