

Colour scheme and readability
 We have implemented a consistent colour scheme for components, sheets, and for wires, labels, nets, buses, ports, and harnesses.

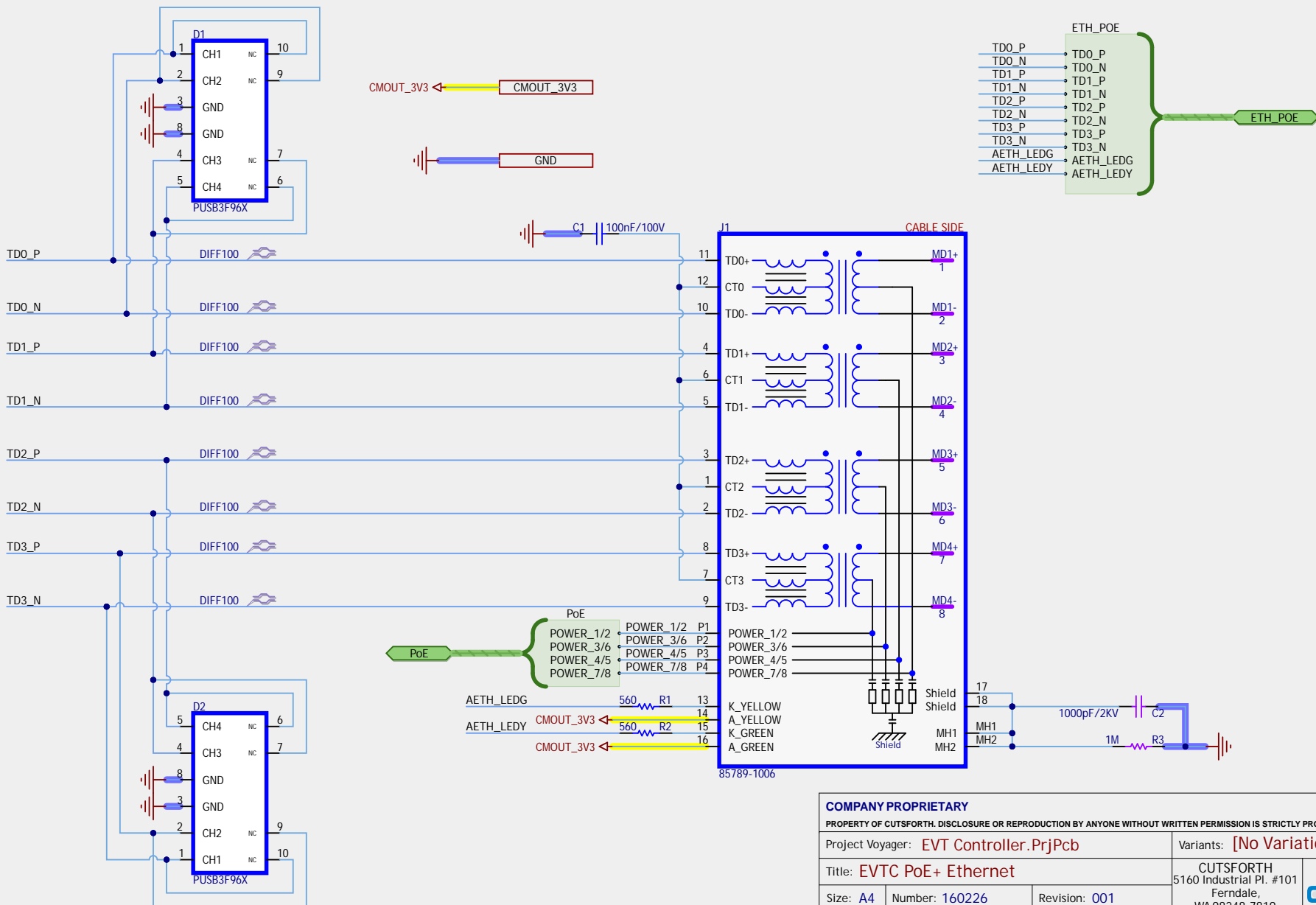
0201	0402	0603	0805	1206	1210
------	------	------	------	------	------

All passive parts with footprints 0201, 0402, 0603, 0805, and 1206 have a dedicated colour, allowing reviewers to immediately see which package sizes are used and quickly assess whether the selection is appropriate and easy to change.

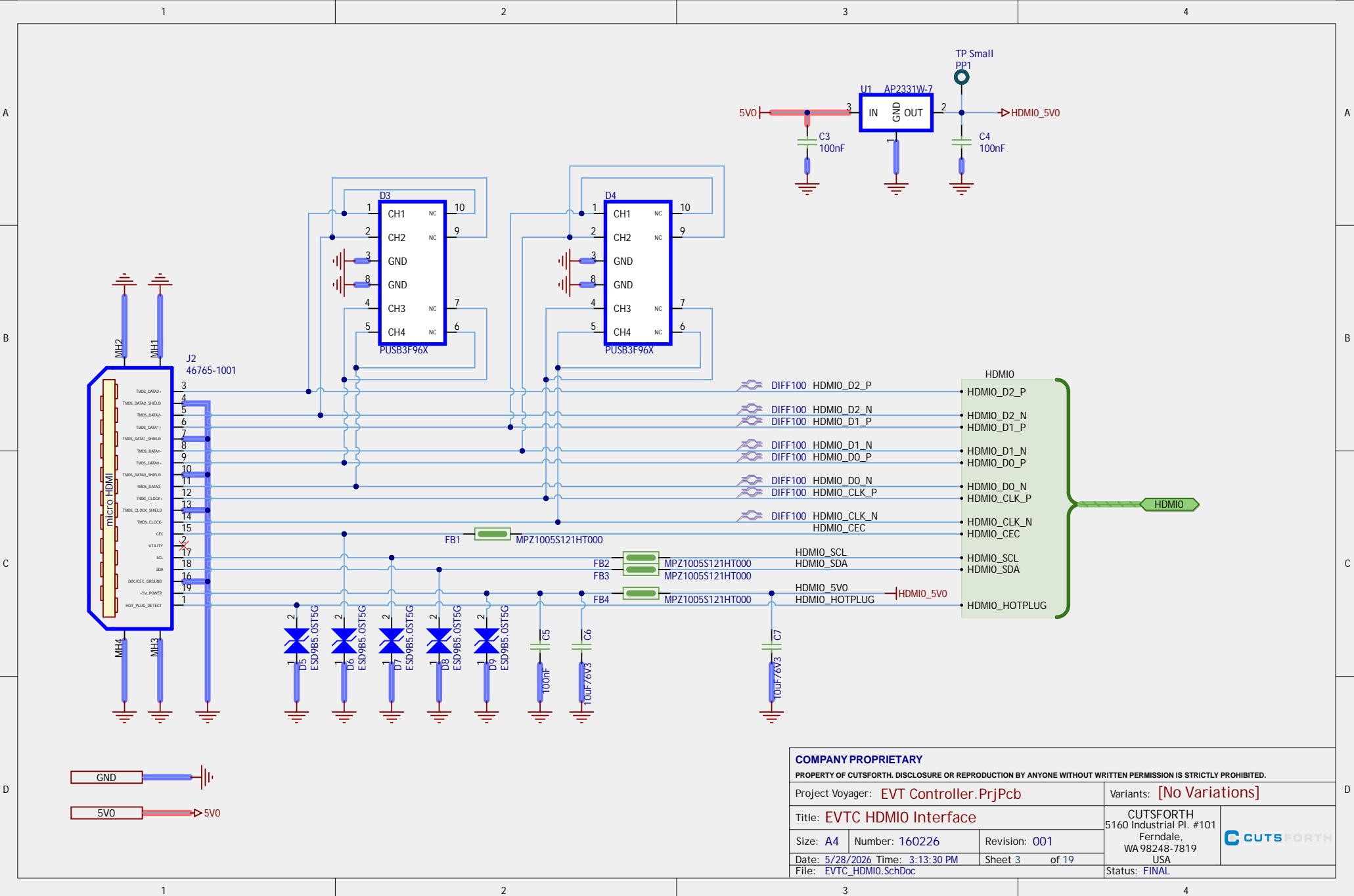
U_EVT Controller Hardware
 EVT Controller Hardware SchDoc

HARDWARE

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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVT Controller TOP Level Sheet		CUTSFORTH 5160 Industrial Pl. #101 Ferdale, WA 98248-7819 USA	
Size: A3	Number: 160226	Revision: 001	Status: FINAL
Date: 5/28/2026	Time: 3:13:29 PM	Sheet 1 of 19	
File: EVT_CTR_Top_Level_SchDoc			



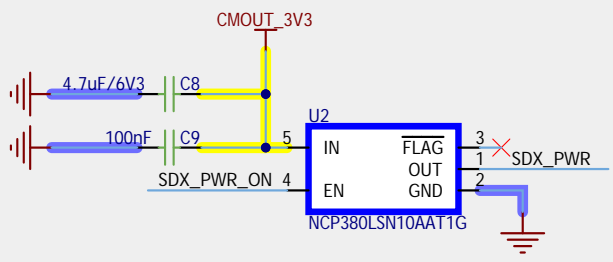
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC PoE+ Ethernet		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A4	Number: 160226	Revision: 001	
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 2 of 19	
File: EVTC PoE+ Ethernet.SchDoc		Status: FINAL	



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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC HDMIO Interface		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A4	Number: 160226	Revision: 001	
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 3 of 19	
File: EVTC_HDMIO.SchDoc		Status: FINAL	

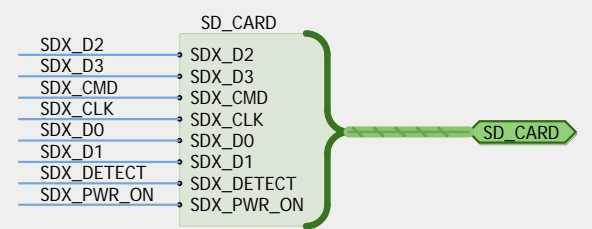
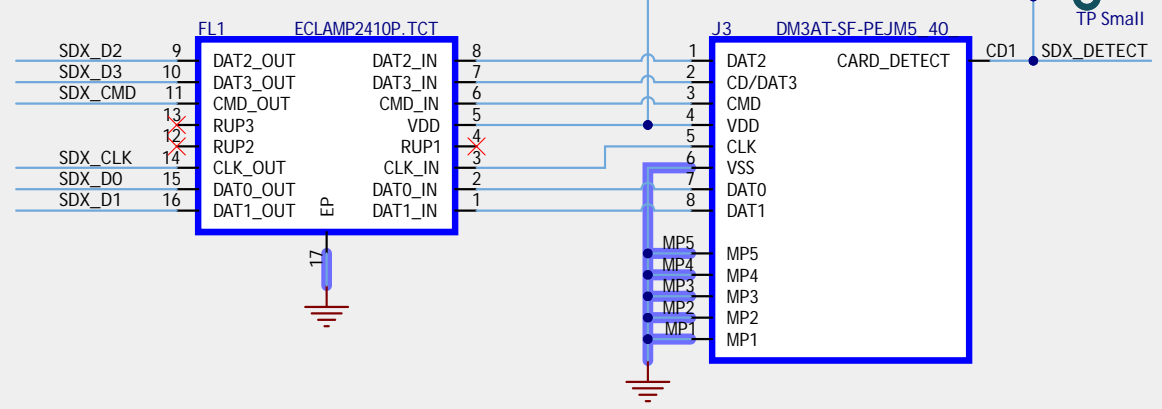
GND

CMOUT_3V3

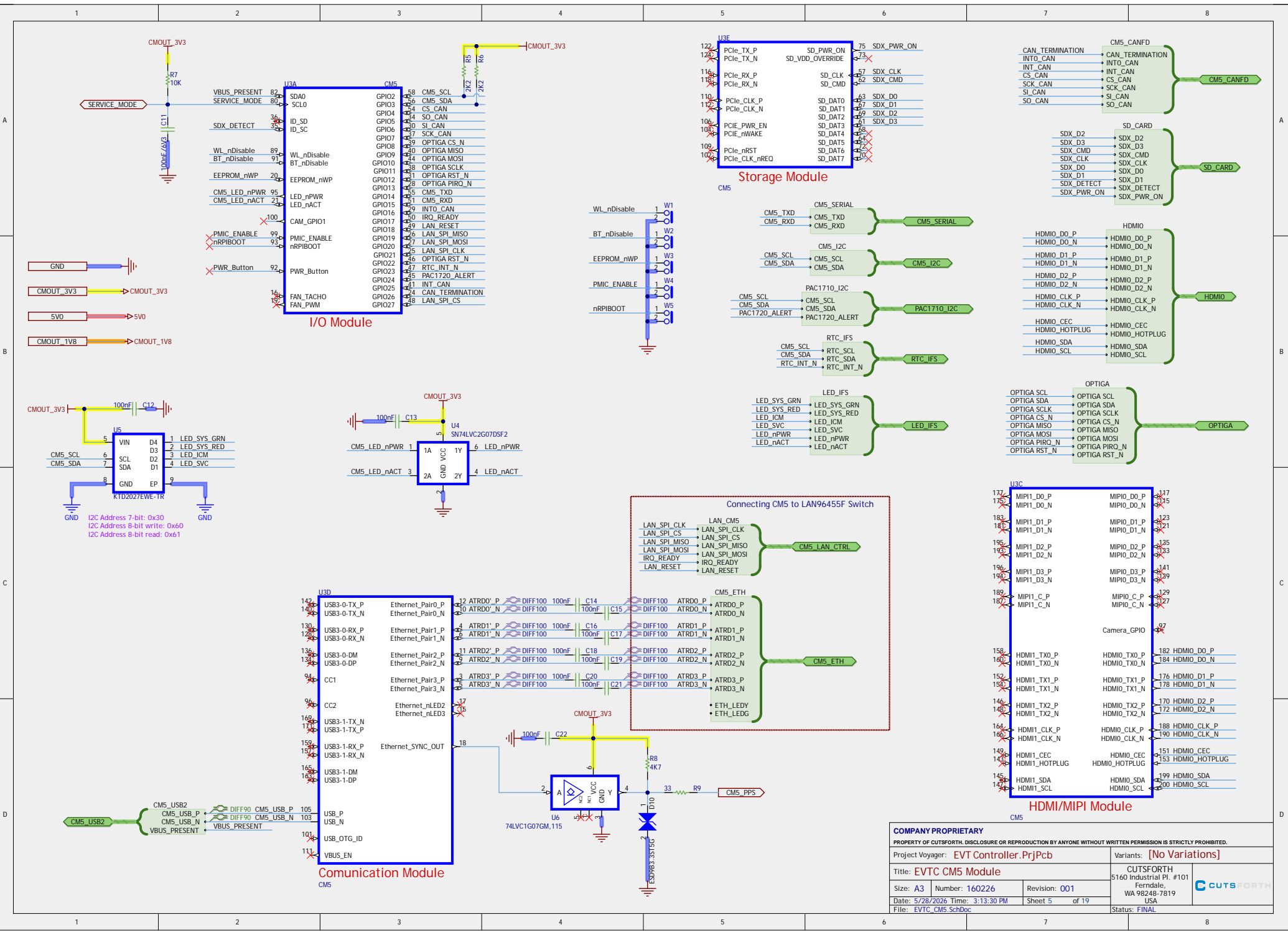


CMOUT_3V3 is originated by CM5 and is protected by UPS

Check if we can use with non lite CM5

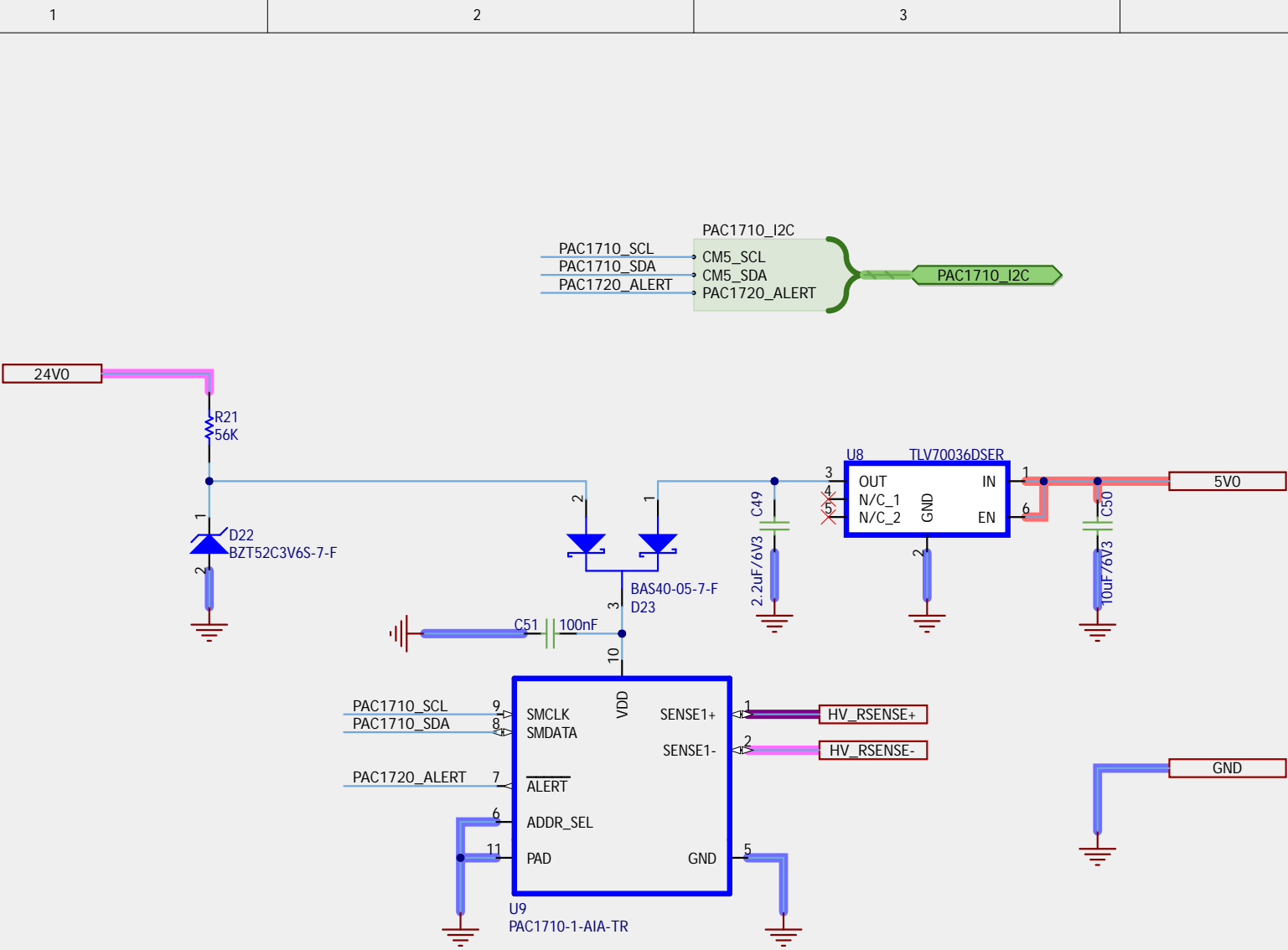


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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC SD Card Interface		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 4 of 19	Status: FINAL	
File: EVTC_SD_CARD.SchDoc			

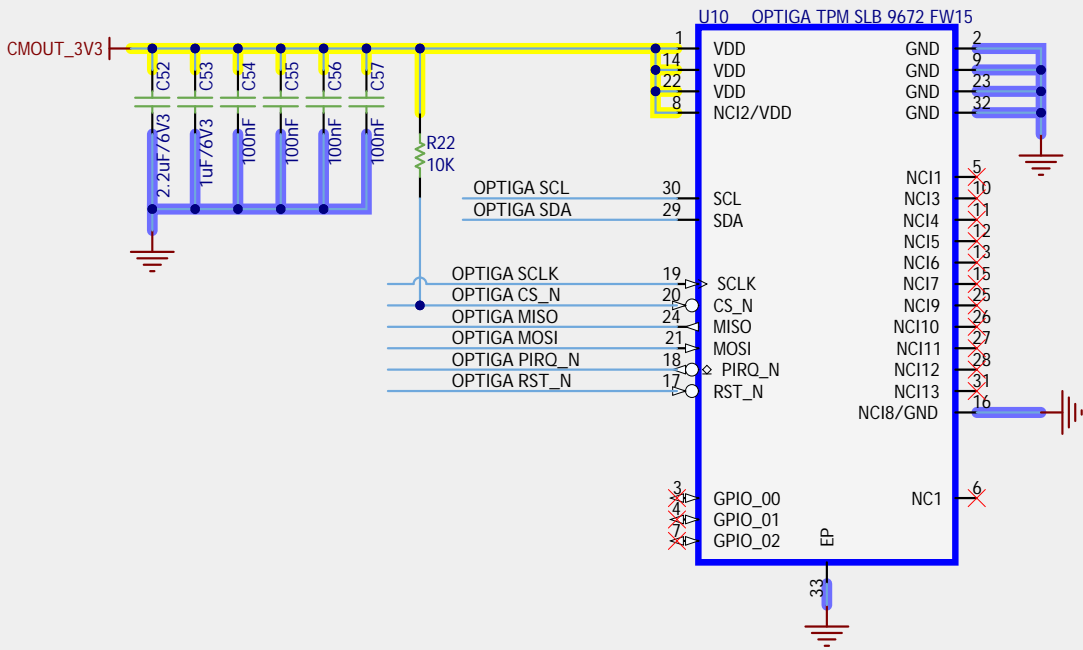


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Project Voyager: EVTC Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC CM5 Module		CUTSFORTH	
Size: A3	Number: 160226	Revision: 001	Formdate: 5160 Industrial Pl. #101
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 5 of 19	WA 98248-7819
File: EVTC_CM5_SchDoc			USA
			Status: FINAL

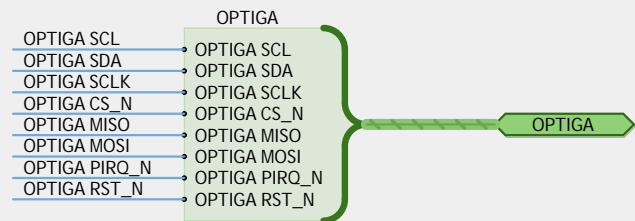


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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC Current Sensors		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 7 of 19	Status: FINAL	
File: EVTC_Current_Sensor.SchDoc			

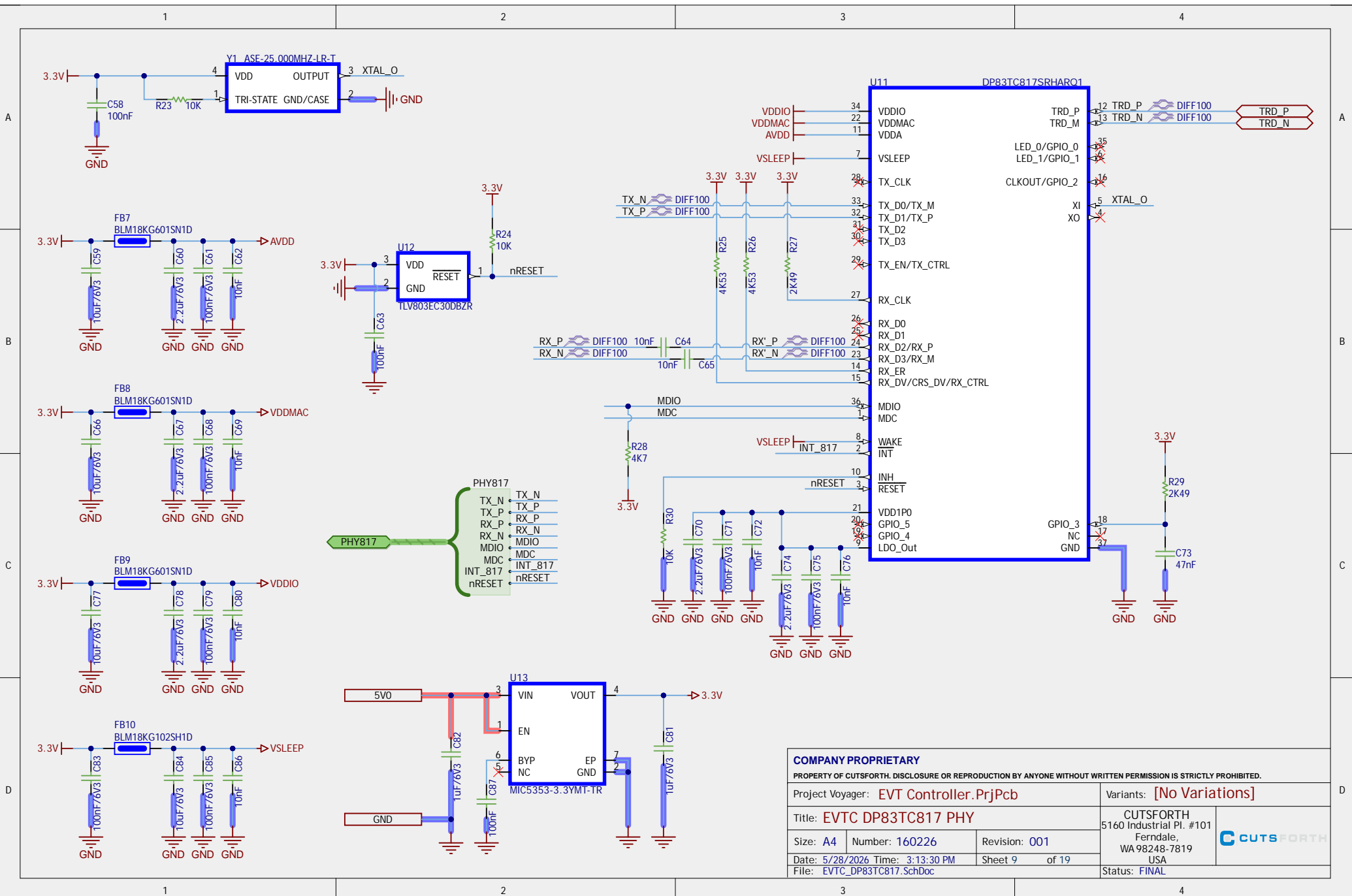


CMOUT_3V3 → CMOUT_3V3

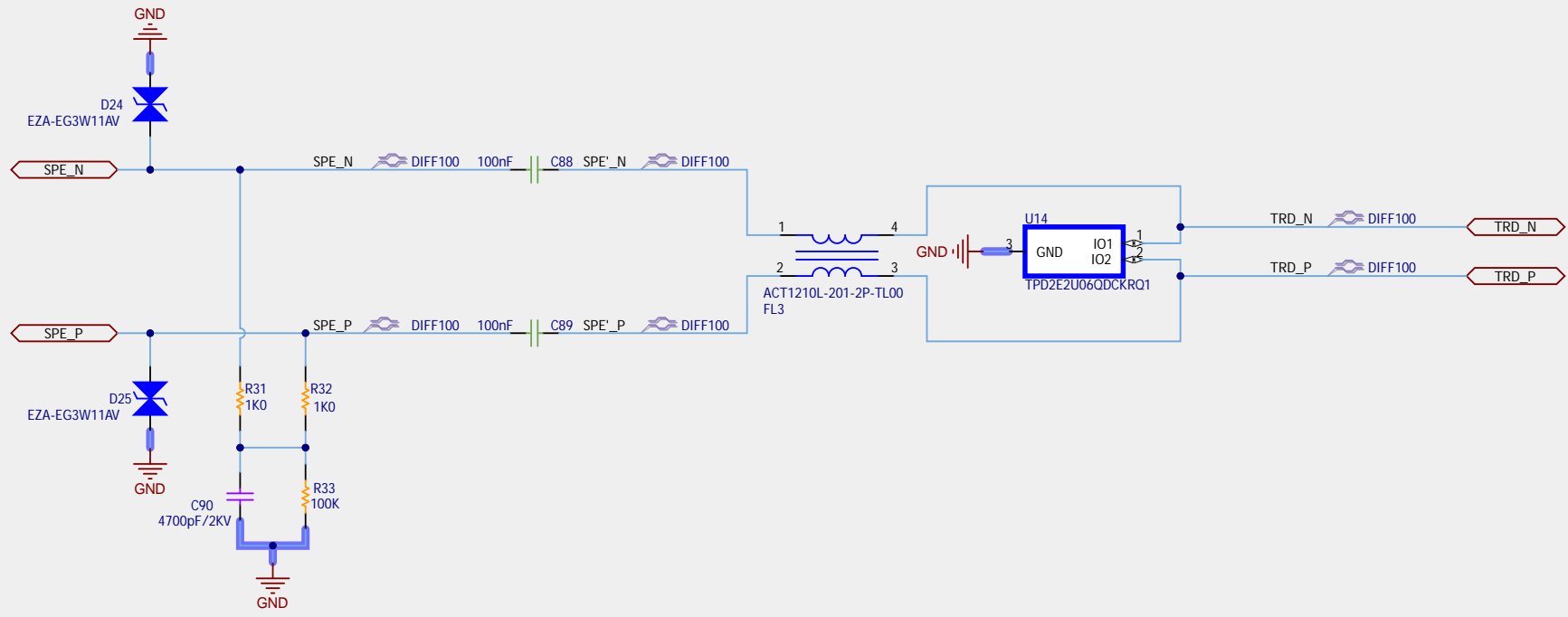
GND → GND



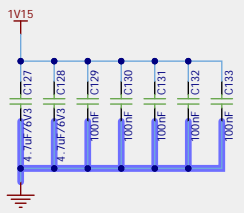
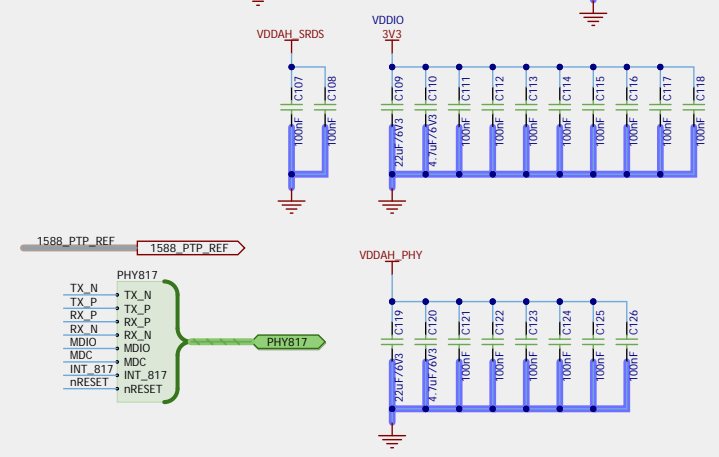
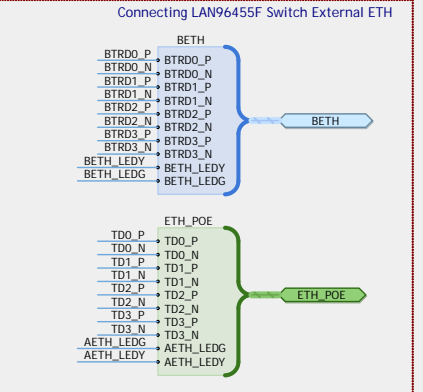
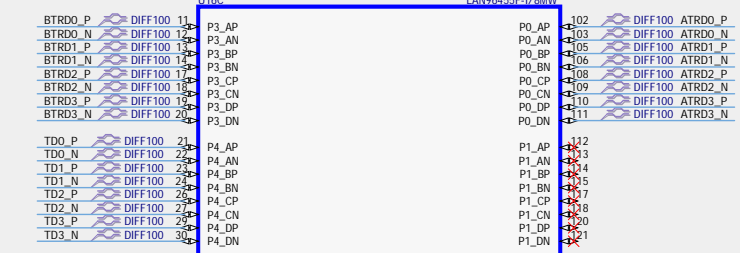
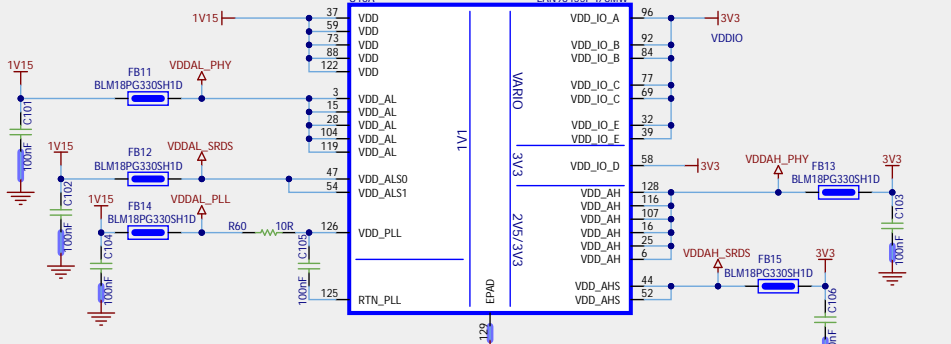
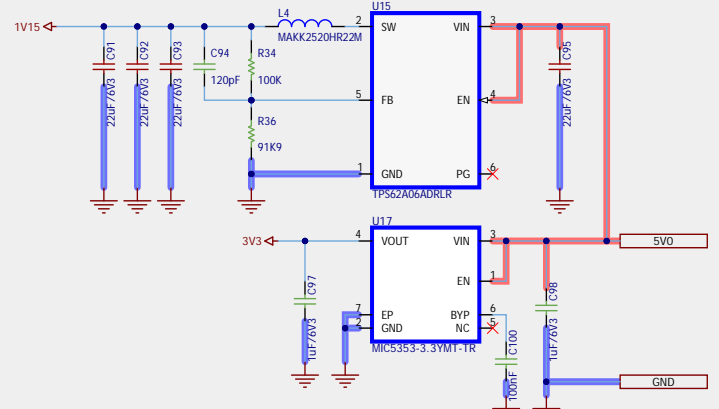
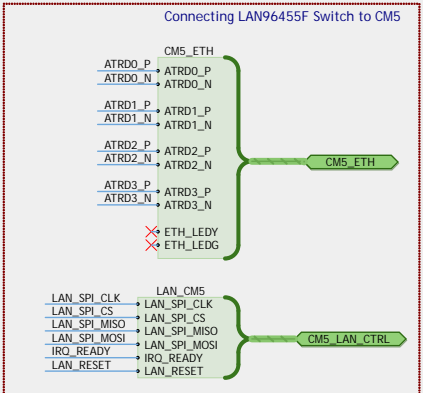
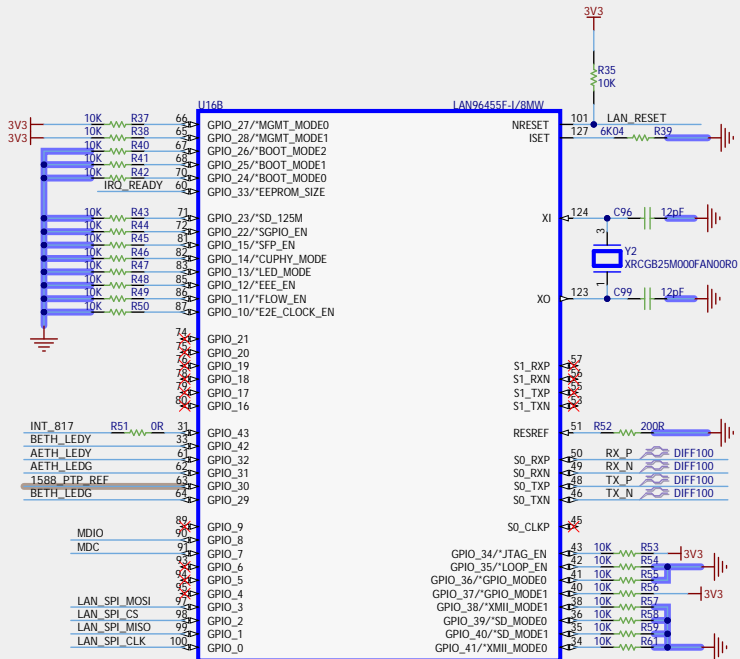
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC OPTIGA		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 8 of 19	Status: FINAL	
File: EVTC_OPTIGA.SchDoc			



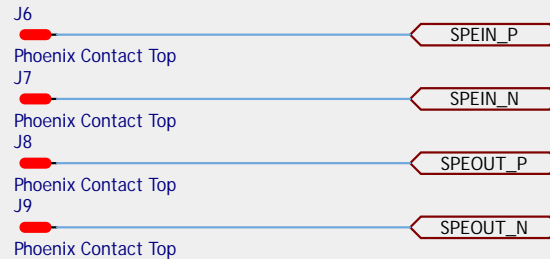
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC DP83TC817 PHY		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A4	Number: 160226	Revision: 001	CUTSFORTH
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 9 of 19	
File: EVTC_DP83TC817.SchDoc		Status: FINAL	



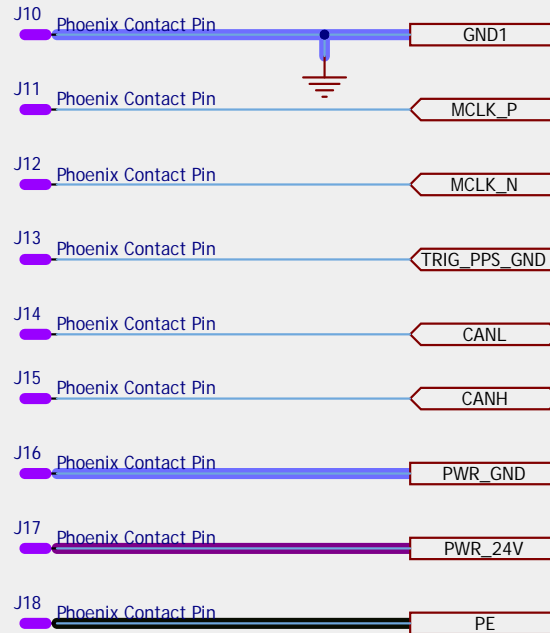
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]
Title: EVT Controller SPE BUS		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA
Size: A4	Number: 160226	Revision: 001
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 10 of 19
File: EVTC_SPE_BUS.SchDoc		Status: FINAL



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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC LAN96455F Switch		CUTSFORTH 5160 Industrial Pl. #101 Fermdale WA 98248-7819 USA	
Size: A3	Number: 160226	Revision: 001	Status: FINAL
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 11 of 19	
File: LAN96455F_SchDoc			



	LEFT SIDE	MODULE	RIGHT SIDE	
1	SPEIN_P	Pass Throught Switch	SPEOUT_P	1
2	SPEIN_N	Pass Throught Switch	SPEOUT_N	2
3	GND	Direct Connect	GND	3
4	MCLK_P	Direct Connect	MCLK_P	4
5	MCLK_N	Direct Connect	MCLK_N	5
6	TRIG/PPS/OPT GND	Direct Connect	TRIG/PPS/OPT GND	6
7	CAN_H	Direct Connect	CAN_H	7
8	CAN_L	Direct Connect	CAN_L	8
9	PWR_GND	Direct Connect	PWR_GND	9
10	PWR_24V	Direct Connect	PWR_24V	10



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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC DIN BUS		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 12 of 19	File: EVTC_DIN_BUS.SchDoc	
		Status: FINAL	

1

2

3

4

A

A

H1 2707482



Housing 2707482

H2 2914877



Housing 2914877



PCB1



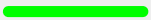
ASM1

H3



Raspberry Pi CM5 Heat-Sink

H4



Front Panel Slide

Fiducials :



B

B

C

C

D

D

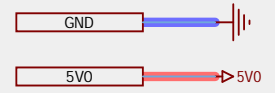
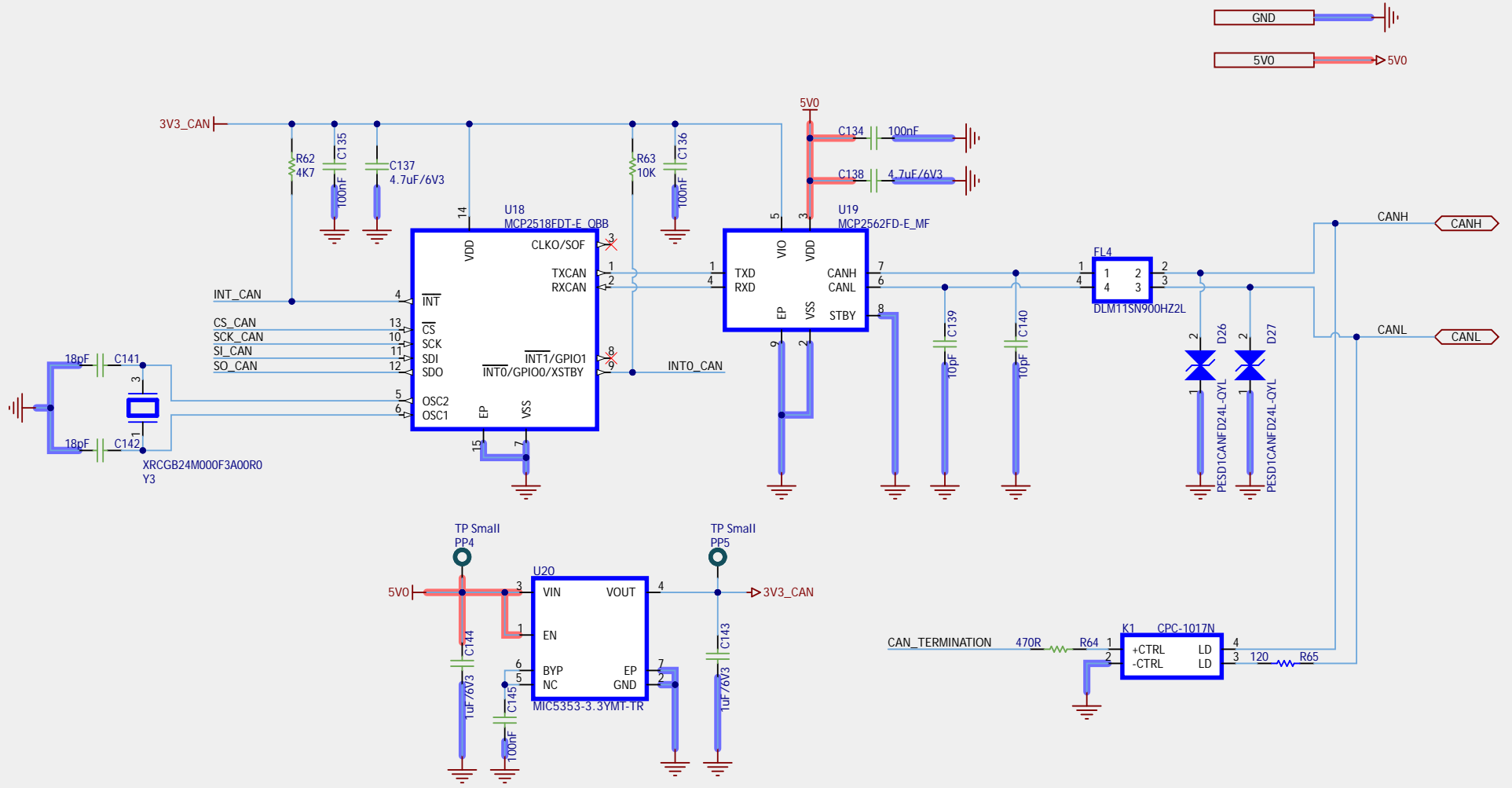
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2

3

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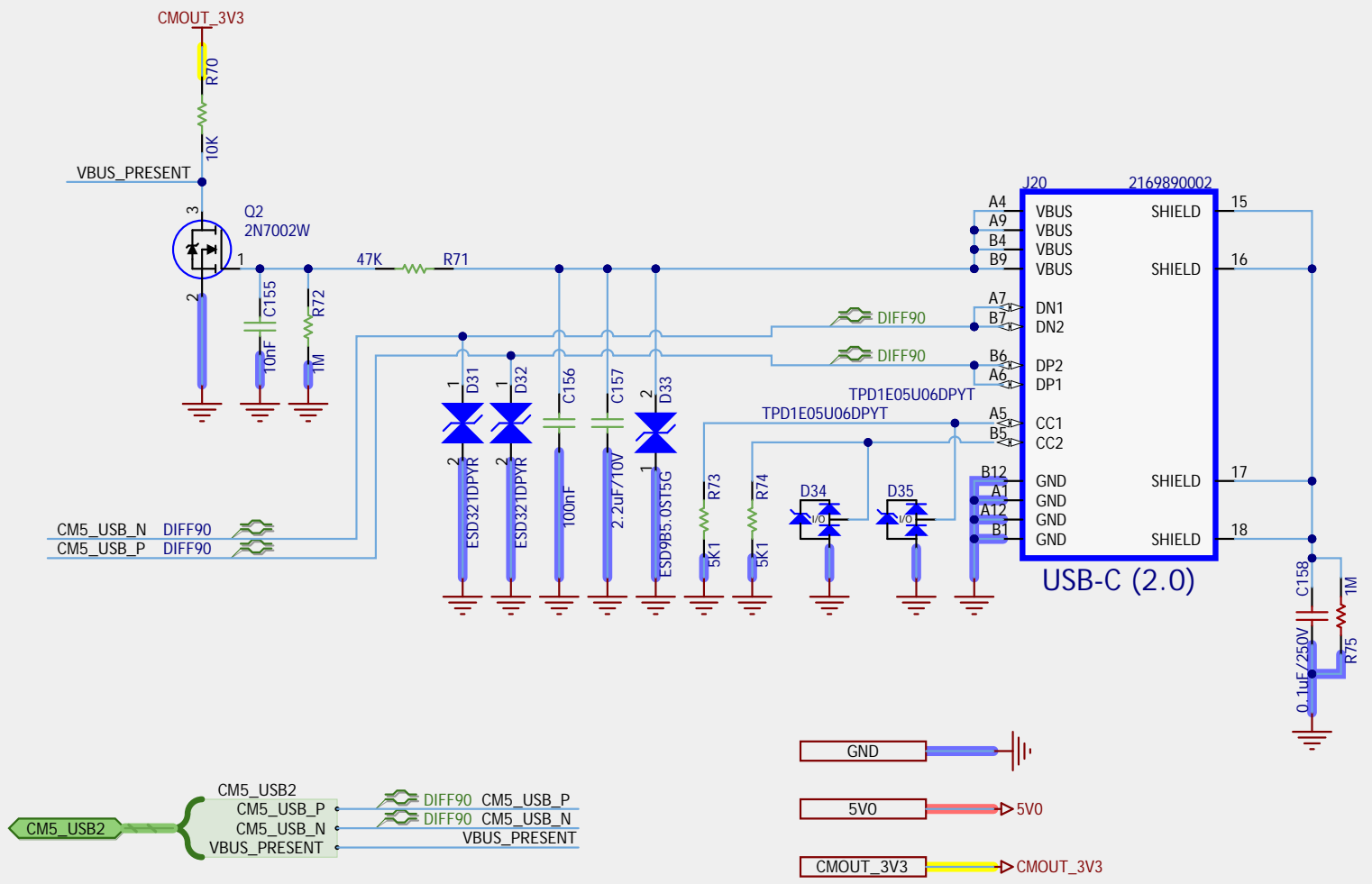
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC Hardware used for BOM Listing		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 13 of 19		
File: EVTC Hardware.SchDoc		Status: FINAL	



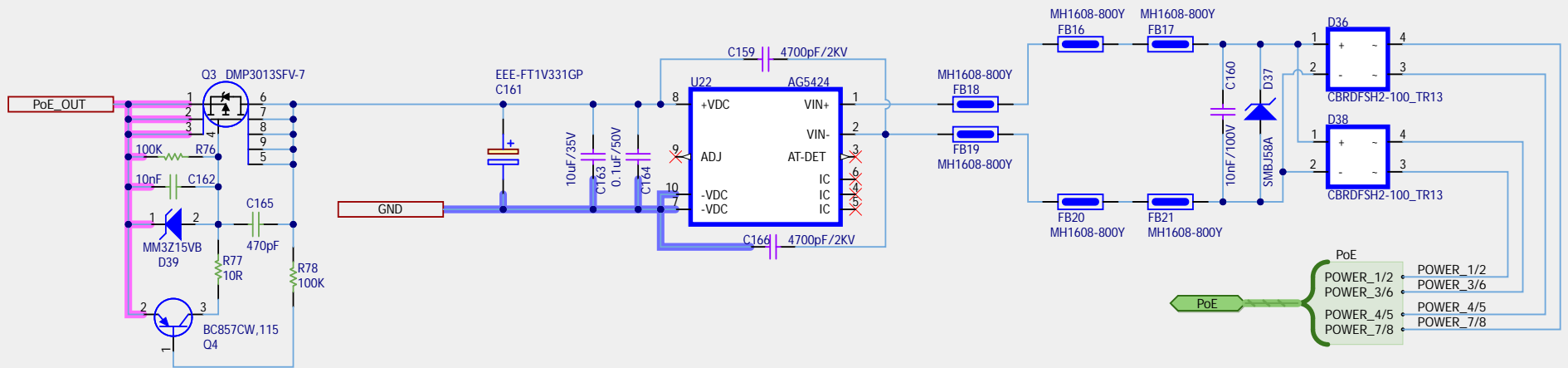
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC CANF Interface		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A4	Number: 160226	Revision: 001	
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 14 of 19	
File: EVTC_CANFD.SchDoc		Status: FINAL	



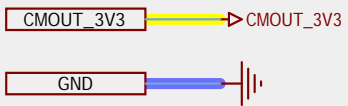
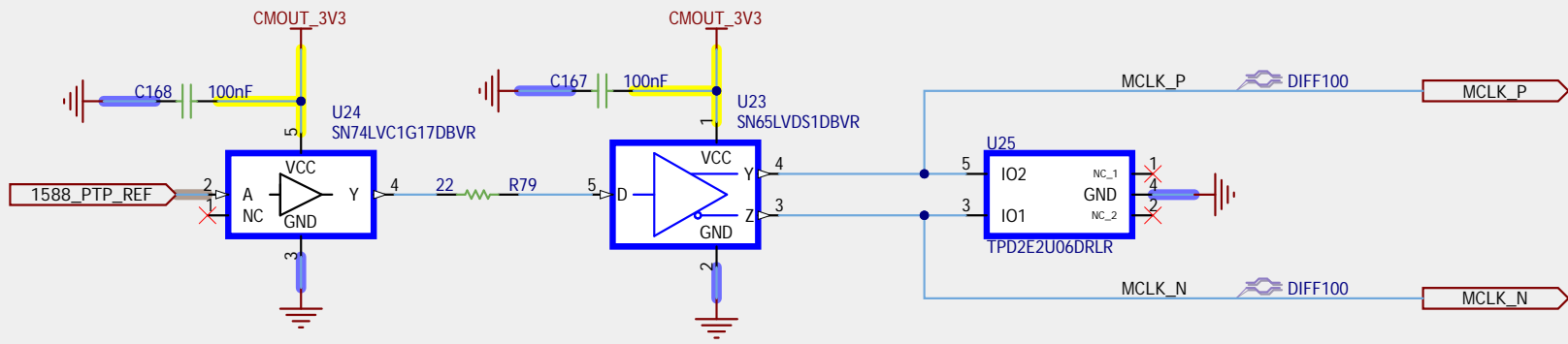
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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC Etherent non PoE		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 15 of 19		
File: EVTC_nonPoE_Ethernet.SchDoc		Status: FINAL	



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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC USB2 UFP DFP USB-C		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226	Revision: 001	
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 17 of 19		
File: EVTC_USB2.0_UFP_DFP_USBC.SchDoc			Status: FINAL



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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC PoE+ Module		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A4	Number: 160226	Revision: 001	
Date: 5/28/2026	Time: 3:13:30 PM	Sheet 18 of 19	
File: EVTC PoE+.SchDoc		Status: FINAL	



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Project Voyager: EVT Controller.PrjPcb		Variants: [No Variations]	
Title: EVTC 1588/PTP Reference		CUTSFORTH 5160 Industrial Pl. #101 Ferndale, WA 98248-7819 USA	
Size: A	Number: 160226		
Date: 5/28/2026 Time: 3:13:30 PM	Sheet 19 of 19	Status:	
File: EVTC 1588_PTP Reference.SchDoc			

