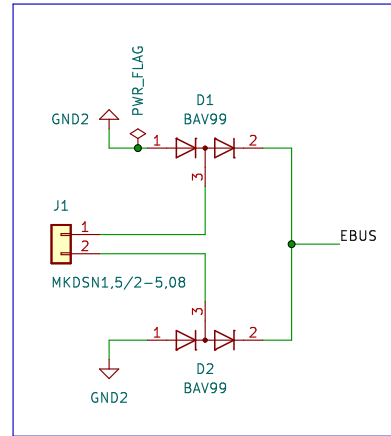
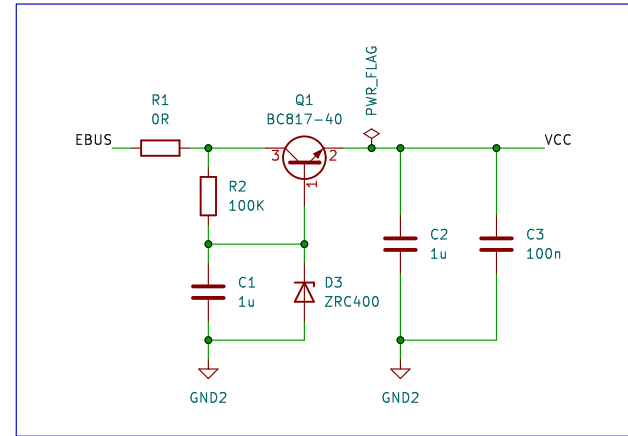


eBus Signal & Reverse Polarity Protection

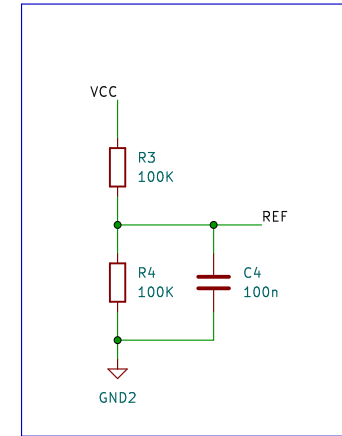


Power from eBus

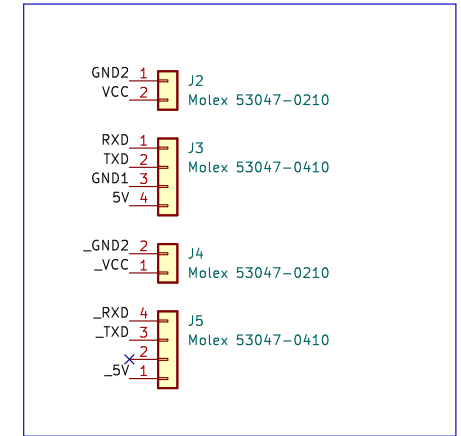


[Alternatives] ZRC400: LM4040 4.096V, ADR5044; BC817-40: S9013 J3

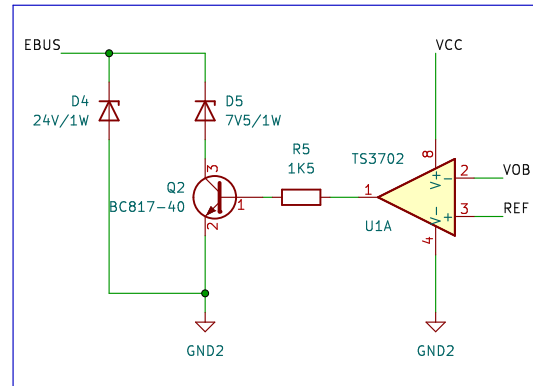
Reference Voltage for Comparators



Internal Connectors

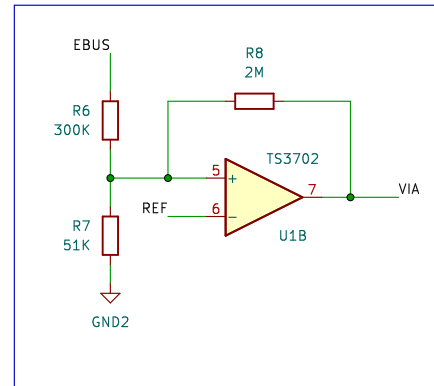


Signal Transmission



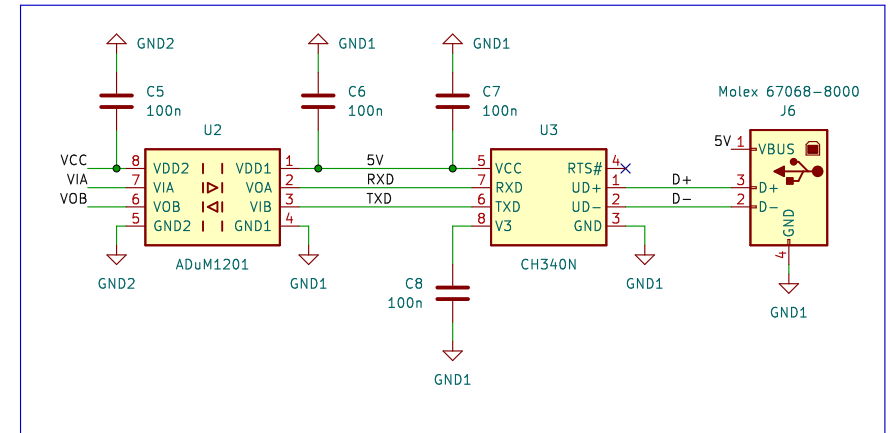
24V/1W: KDZVTR24B, MM1W24; 7V5/1W: KDZVTR7.5B, MM1W7V5
[Alternatives] BC817-40: S9013 J3

Signal Reception



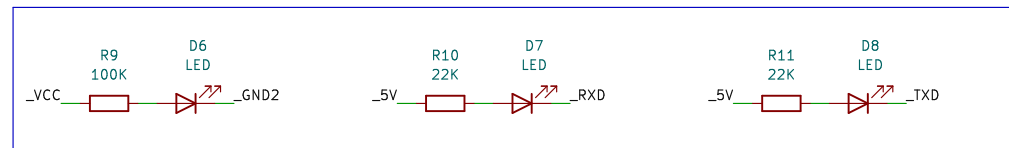
[Alternatives] TS3702: TLC3702

Isolation & UART to USB



[Alternatives] ADuM1201: 2Pai Semi π122U31; CH340N: CH330N

Status LEDs



LED: CHANZON 3mm diffused LED

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Sheet: /
File: ebus2usb.kicad_sch

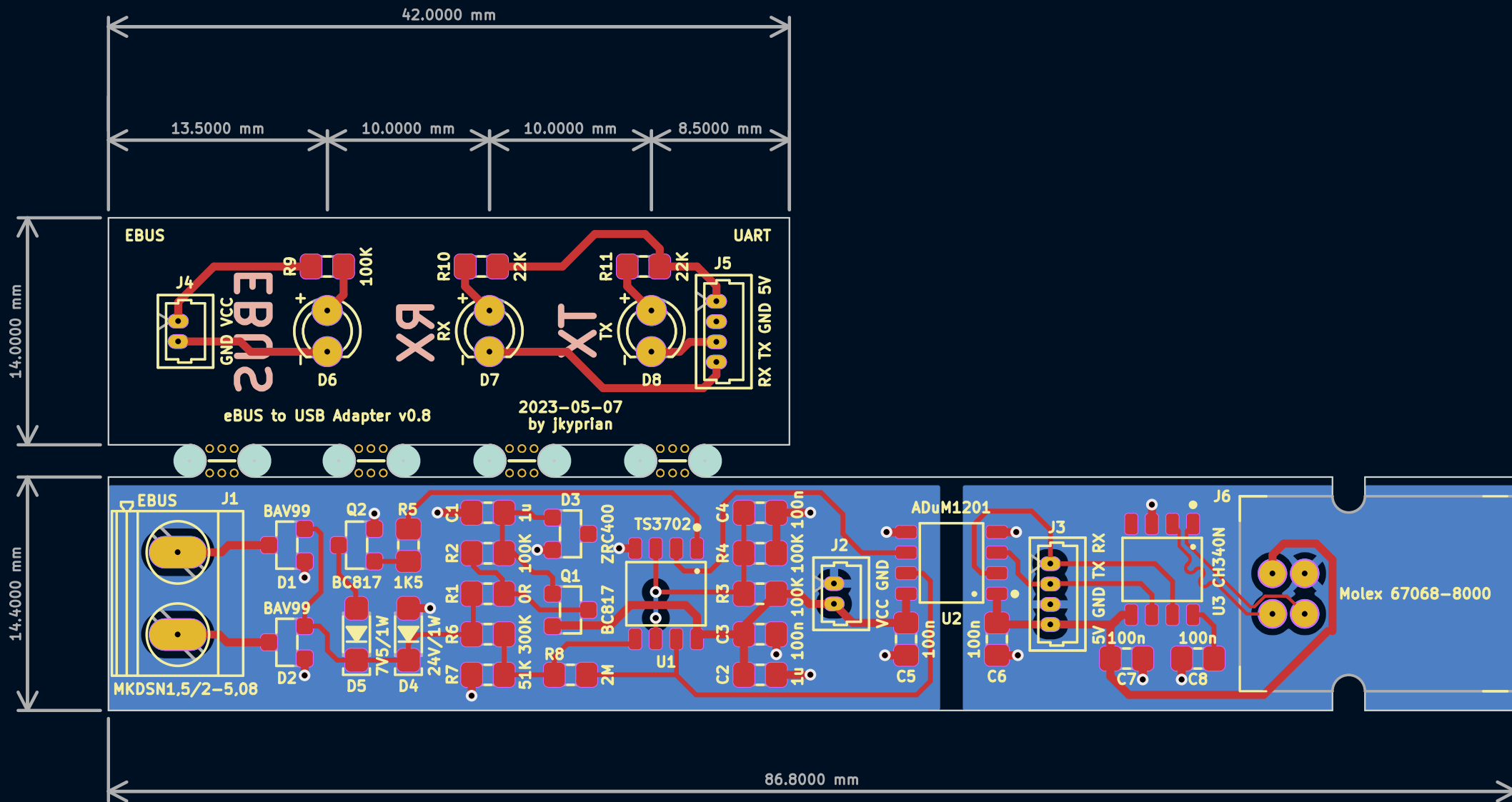
Title: eBUS to USB Adapter

Size: A4 Date: 2023-05-07

KiCad E.D.A. kicad 7.0.2

Rev: v0.8

Id: 1/1



Reference	Value	Footprint	LCSC	Part	Qty
C1, C2	1u	ebus2usb:C0805	C28323	Samsung Electro-Mechanics CL21B105KBFNNNE	2
C3-C8	100n	ebus2usb:C0805	C28233	Samsung Electro-Mechanics CL21B104KCFNNNE	6
D1, D2	BAV99	ebus2usb:SOT-23-3	C2500	Nexperia BAV99,215	2
D3	ZRC400	ebus2usb:SOT-23-3	C2156870	Diodes Incorporated ZRC400F01TA	1
D4	24V/1W	ebus2usb:SOD-123	C209605	Rohm KDZVTR24B	1
D5	7V5/1W	ebus2usb:SOD-123	C209594	Rohm KDZVTR7.5B	1
D6-D8	LED	ebus2usb:LED_D3.0mm		CHANZON 3mm Diffused LED (https://www.aliexpress.com/item/1936229691.html)	3
J1	MKDSN1,5/2-5,08	ebus2usb:MKDSN1,5_2-5,08	C91153	Phoenix Contact MKDSN 1,5/ 2-5,08	1
J2, J4	Molex 53047-0210	ebus2usb:Molex_PicoBlade_53047-0210	C114130	Molex 53047-0210	2
J3, J5	Molex 53047-0410	ebus2usb:Molex_PicoBlade_53047-0410	C504989	Molex 53047-0410	2
J6	Molex 67068-8000	ebus2usb:Molex_670688000	C114097	Molex 67068-8000	1
Q1, Q2	BC817-40	ebus2usb:SOT-23-3	C52801	Nexperia BC817-40,215	2
R1	0R	ebus2usb:R0805	C17477	UNI-ROYAL(Uniroyal Elec) 0805W8F0000T5E	1
R2-R4, R9	100K	ebus2usb:R0805	C149504	UNI-ROYAL(Uniroyal Elec) 0805W8F1003T5E	4
R5	1K5	ebus2usb:R0805	C4310	UNI-ROYAL(Uniroyal Elec) 0805W8F1501T5E	1
R6	300K	ebus2usb:R0805	C17616	UNI-ROYAL(Uniroyal Elec) 0805W8F3003T5E	1
R7	51K	ebus2usb:R0805	C17737	UNI-ROYAL(Uniroyal Elec) 0805W8F5102T5E	1
R8	2M	ebus2usb:R0805	C26112	UNI-ROYAL(Uniroyal Elec) 0805W8F2004T5E	1
R10, R11	22K	ebus2usb:R0805	C17560	UNI-ROYAL(Uniroyal Elec) 0805W8F2202T5E	2
U1	TS3702	ebus2usb:SO08	C283319	STMicroelectronics TS3702CDT	1
U2	ADuM1201	ebus2usb:SO08	C9669	Analog Devices ADUM1201ARZ-RL7	1
U3	CH340N	ebus2usb:SO08	C2977777	WCH(Jiangsu Qin Heng) CH340N	1