

Dual Voltage Auto Select Input



File: duaVoltage.kicad_sch

RS232 & RS485 Transceiver



File: RS232_RS485.kicad_sch

Rx & Tx LED



File: RX_TX_LED.kicad_sch

Multiple Input Configuration Logic



File: Multiple_IO_Input.kicad_sch

Jumper Selection (Hardware)



File: HW_Jumper_Selection.kicad_sch

ZIO-Compatible_connector



File: ZIO-Compatible_Connector.kicad_sch

Pin#	Signal	I/O	Omschrijving
1	DCD	OUT	Data Carrier Detect
2	RXD	IN	Receive Data (naar transceiver)
3	TXD	OUT	Transmit Data (van transceiver)
4	DTR	IN	Data Terminal Ready
5	GND	n.v.t.	Signaal ground
6	DSR	OUT	Data Set Ready
7	RTS	IN	Request To Send
8	CTS	OUT	Clear To Send
9	RI	OUT	Ring Indicator

STANDAARD CONFIGURATIE:

RS232,
software disabled
Jumper Hardware selection
RS485 Termination on R1+R2 and R3+R4 both disabled (gnd)
Slew Rate Control (SLR) set to slow speed

Pin#	Signal	I/O	Omschrijving
1	Z(TX-)	OUT	Data Carrier Detect
2	Y(TX+)	IN	Receive Data (naar transceiver)
3	A(RX+)	OUT	Transmit Data (van transceiver)
4	B(RX-)	IN	Data Terminal Ready

KEYSTONE COLORS

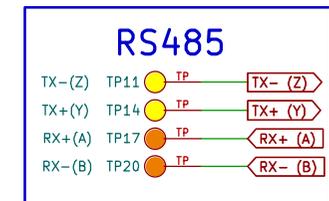
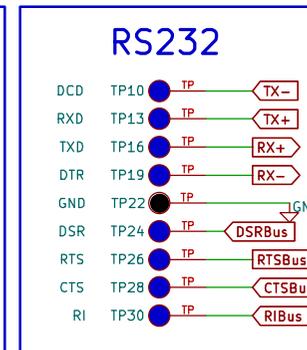
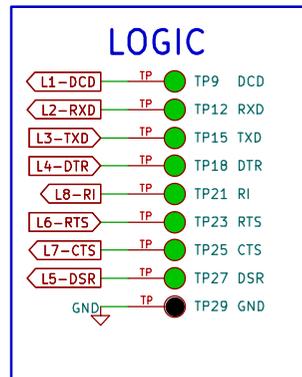
Hoge lus:
5010 - Red - C2906765
5011 - Black - C238127
5012 - White - C2906766
5013 - Orange - C2906767
5014 - Yellow - C238126

5125 - Brown - N/A
5126 - Green - C5272795
5127 - Blue - C5272798
5128 - Grey - C5272780
5129 - Purple - N/A

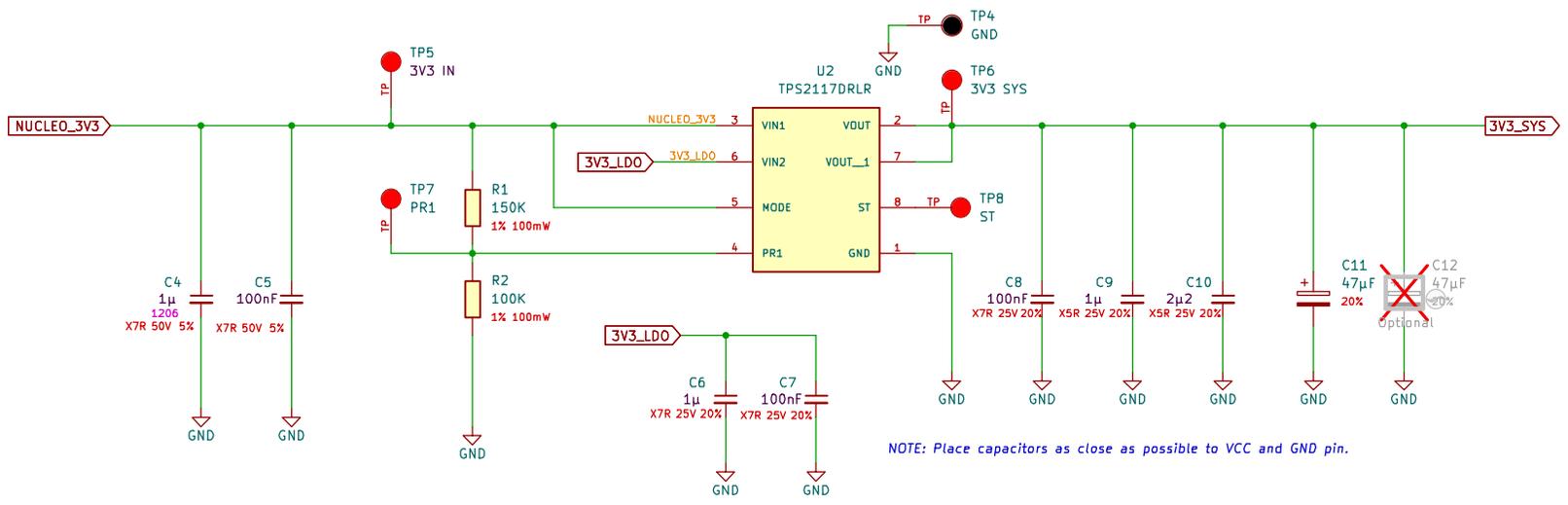
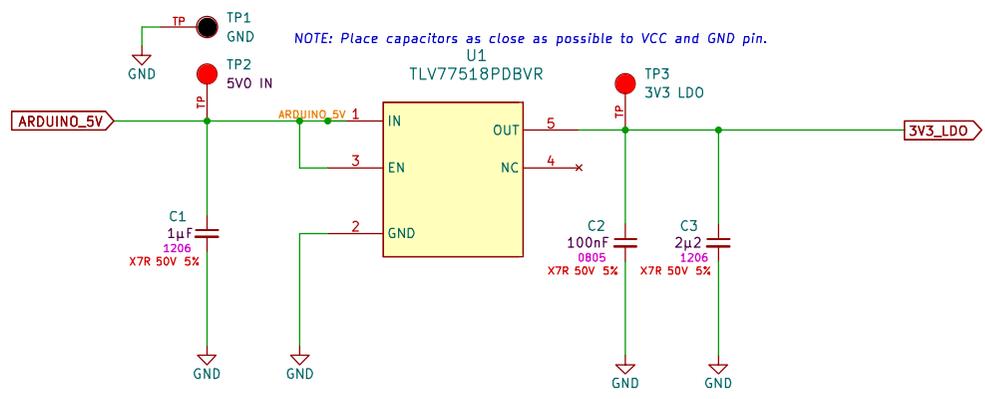
Lage lus:
5005 - Red - C2906763
5006 - Black - C2906764
5007 - White - C238125
5008 - Orange - C3029544
5009 - Yellow - C238126

5121 - Green - C5272789
5122 - Blue - C5272796
5123 - Grey - C5272786

THVD4431RHAR	Function	I/O	GPIO	ZIO Connector
09	VIO	Output	N/A	N/A
14	MODE0	Input	PF13	CN07 - #20
15	MODE1	Input	PC3	CN09 - #05
13	MODE2	Input	PC2	CN09 - #09
11	SLR	Input	PA5	CN07 - #10
12	DIR	Input	PG12	CN10 - #02
17	TERM_TX	Input	PB1	CN09 - #07
18	TERM_RX	Input	PA3	CB09 - #01
01	L1-DCD	Output	PB5	CN07 - #14
05	L5-DSR	Output	PB9	CN07 - #04
02	L2-RXD	Output	PB7	CN10 - #16
06	L6-RTS	Input	PG14	CN10 - #12
03	L3-TXD	Input	PB6	CN10 - #14
07	L7-CTS	Output	PE13	CN10 - #08
04	L4-DTR	Input	PA6	CN07 - #12
08	L8-RI	Output	PB8	CN07 - #02

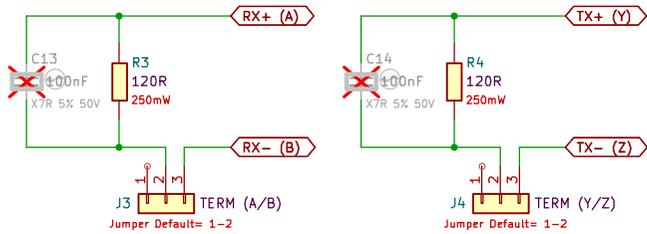


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			Title: STM32 Nucleo RS232 & RS485 Expansion Board V2
			Sheet: /
			Size: A4 Date: 2026-02-10 Rev: 1.0.0238
			KiCad E.D.A. 9.0.7 Id: 1/7

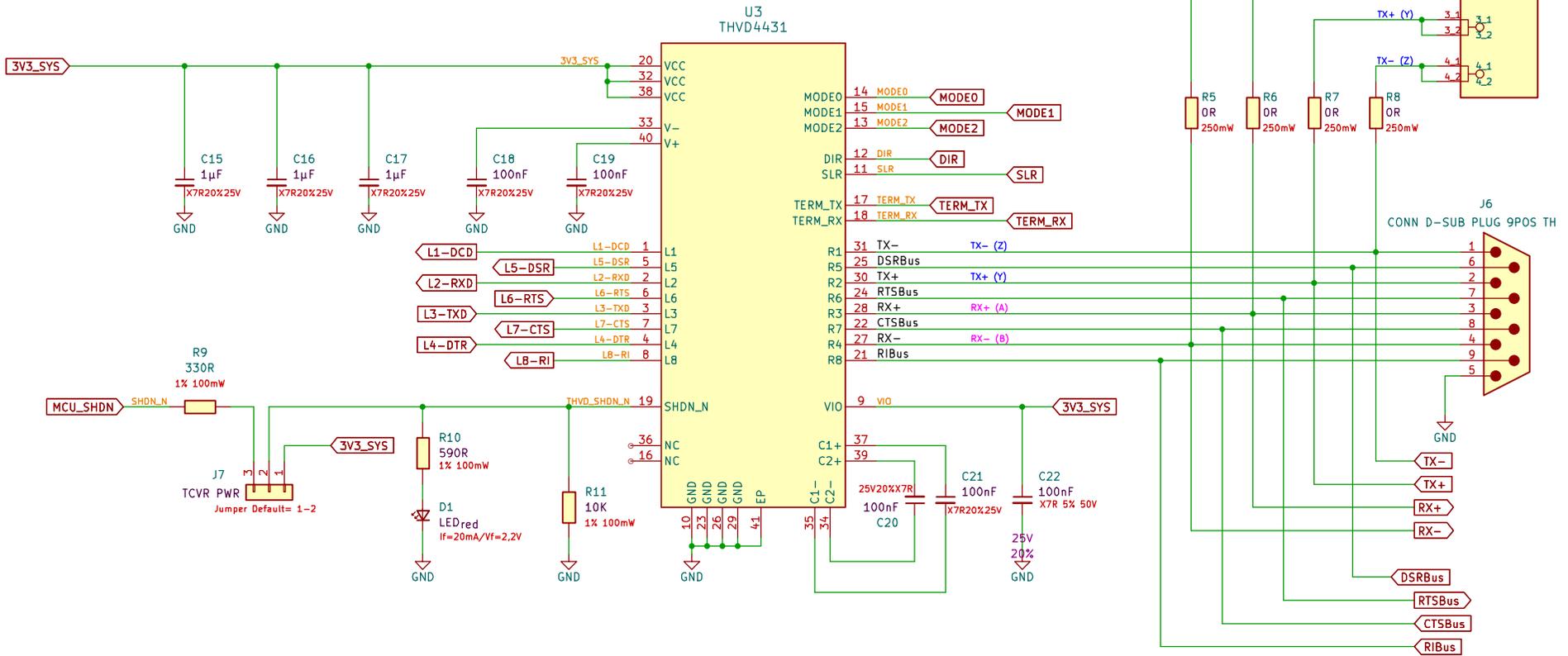
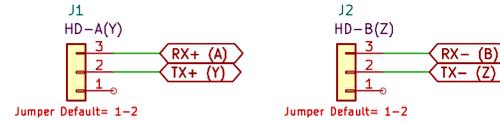


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			Size: A4 Date: 2026-02-10 Rev: 1.0.0238
			KiCad E.D.A. 9.0.7 Id: 2/7

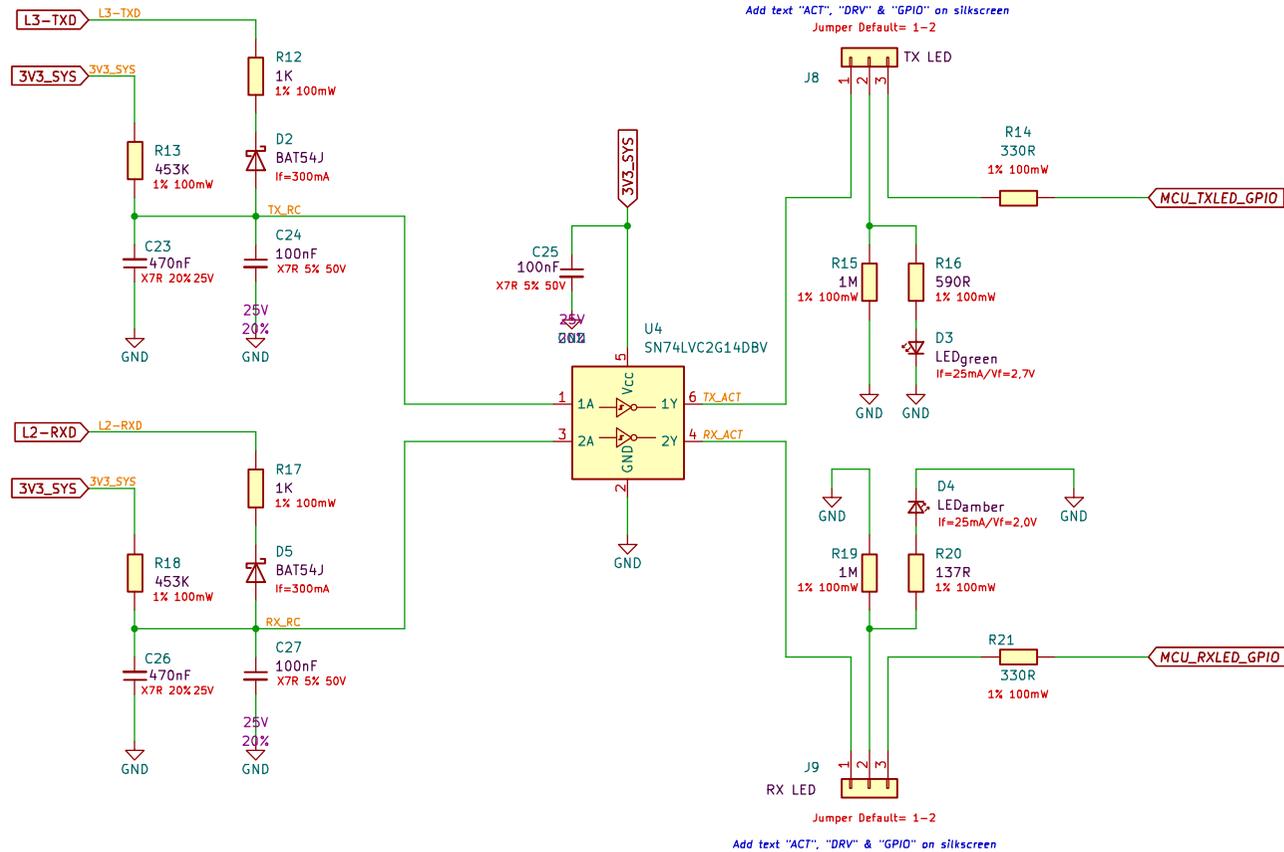
RS485 External Termination



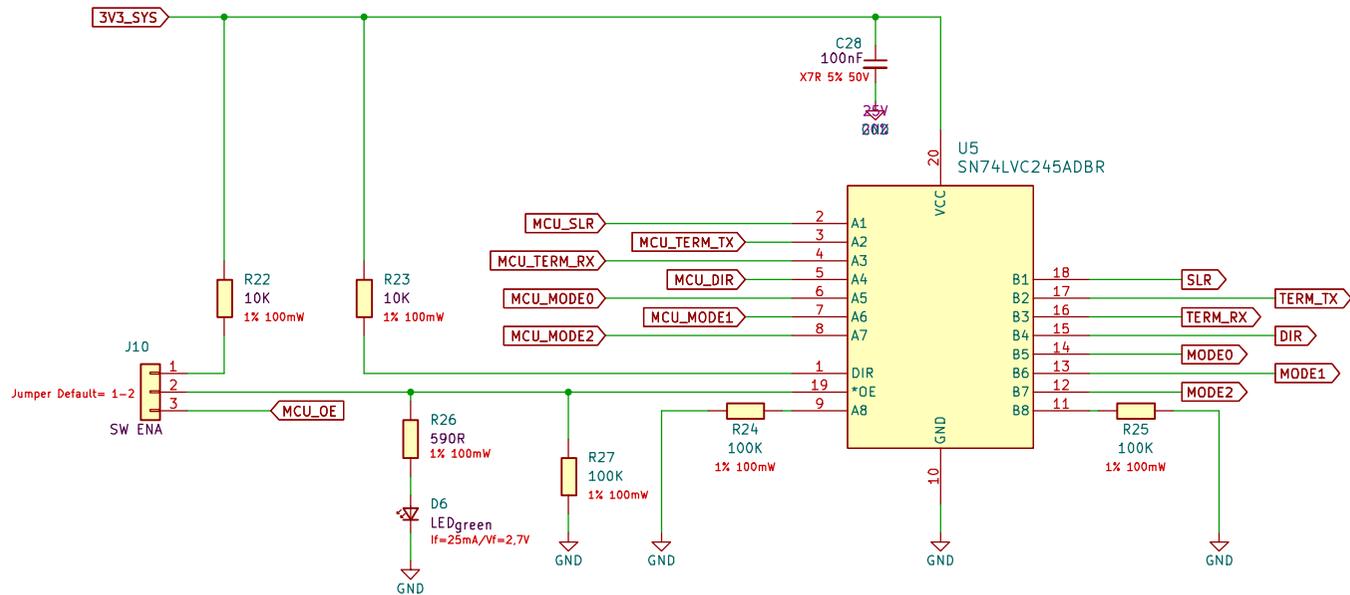
RS485 Half Duplex Enable



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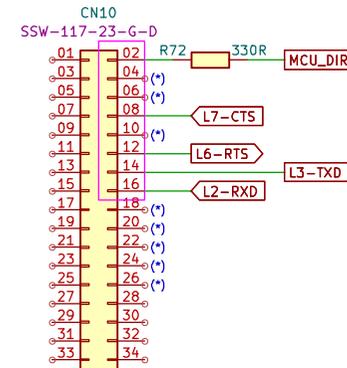
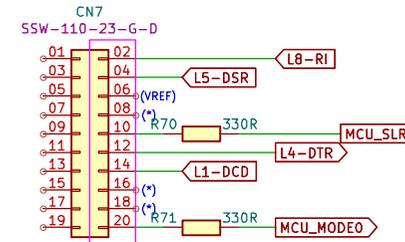
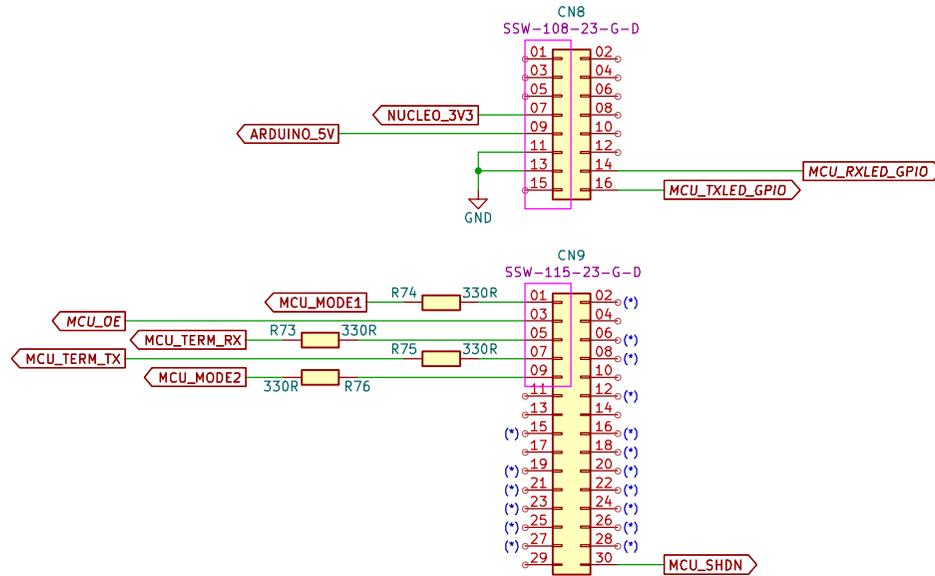
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		KiCad E.D.A. 9.0.7	Rev: 1.0.0238
			Id: 5/7

Pins marked with purple rectangles are the Arduino V3 compatible pins.

Pins marked with (*) are occupied by the X-NUCLEO-GFX02Z1 - Display expansion board



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			Id: 7/7