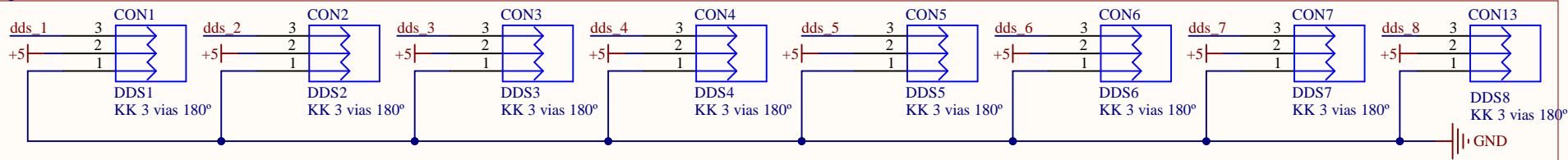
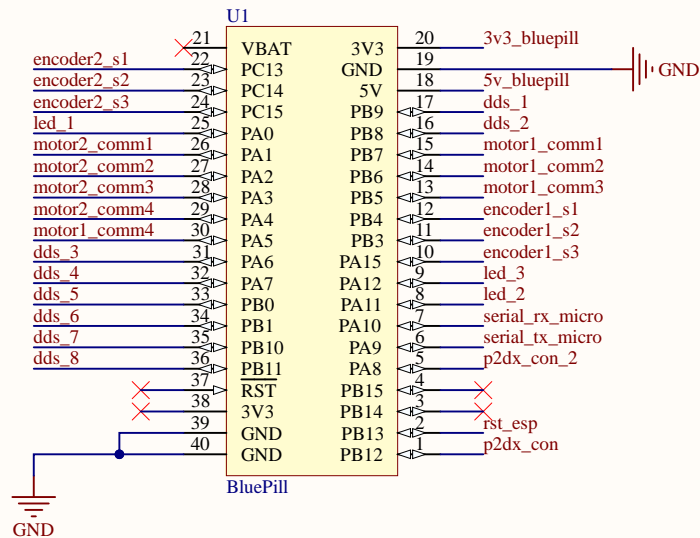


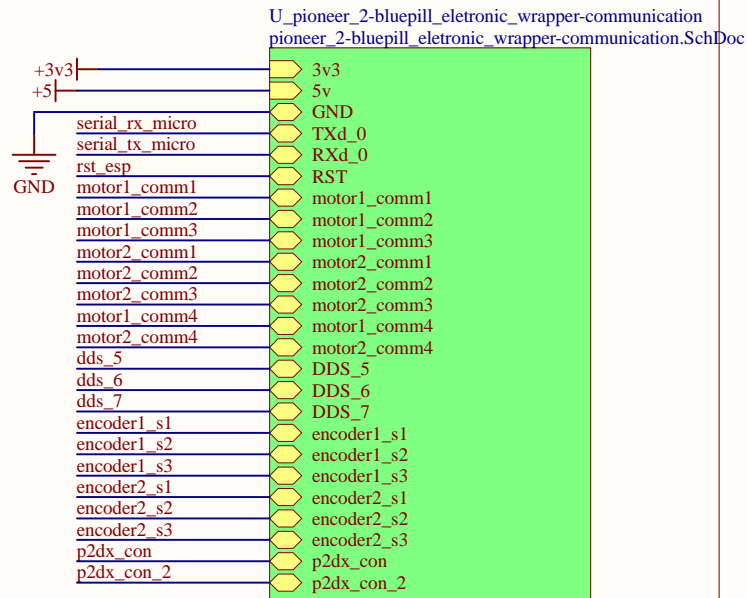
## Digital Distance Sensor



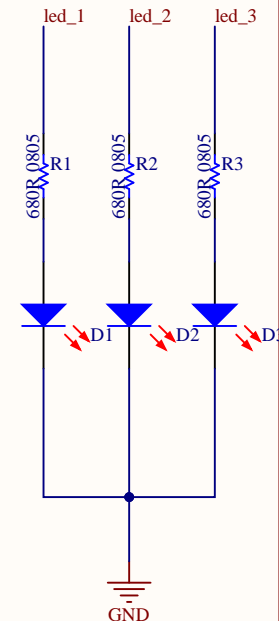
## Bluepill



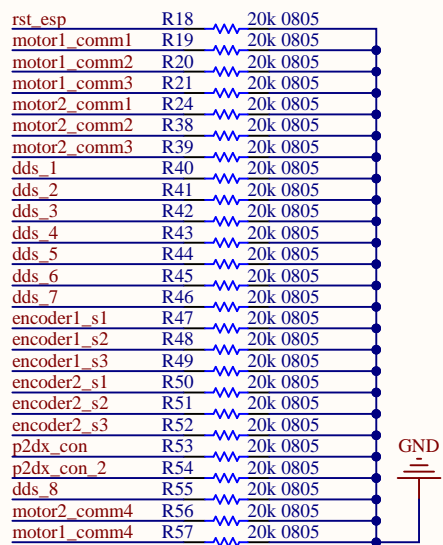
## Communication



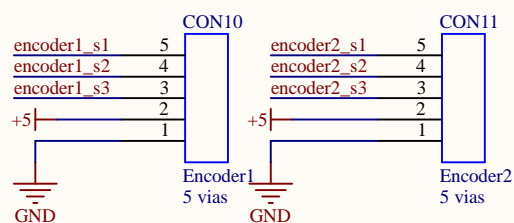
## Leds



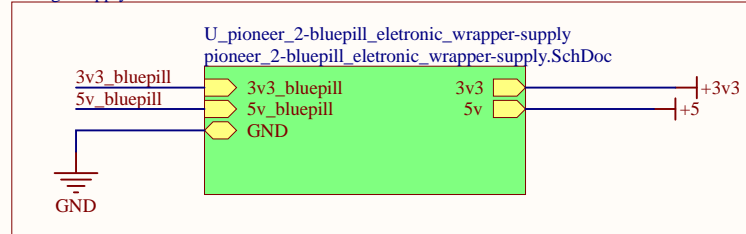
## Pull Downs



## Encoders



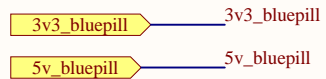
## Voltage Supply



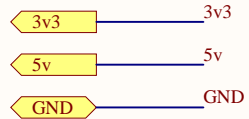
Title **pioneer\_2-bluepill\_eletronic\_wrapper**

Size	Number	Revision
A		
Date:	1/29/2025	Sheet of
File:	C:\Users\...\pioneer_2-bluepill_eletronic_wrapper.SchDoc	

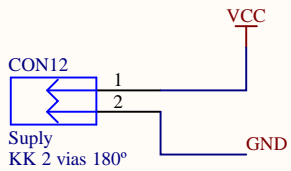
## Inputs



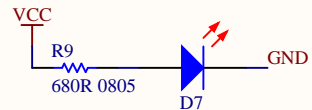
## Outputs



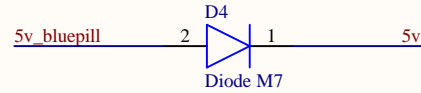
## Input Supply



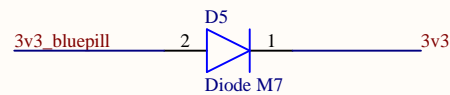
## Supply Voltage Led



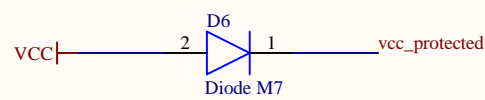
## 5v Protection



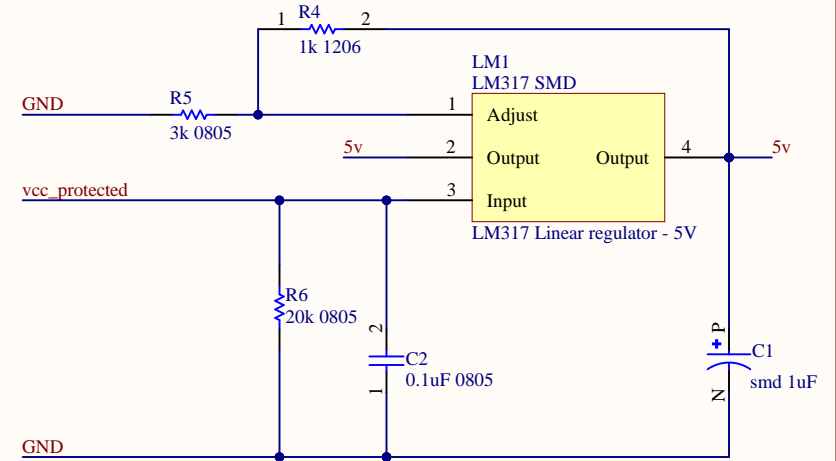
## 3v3 Protection



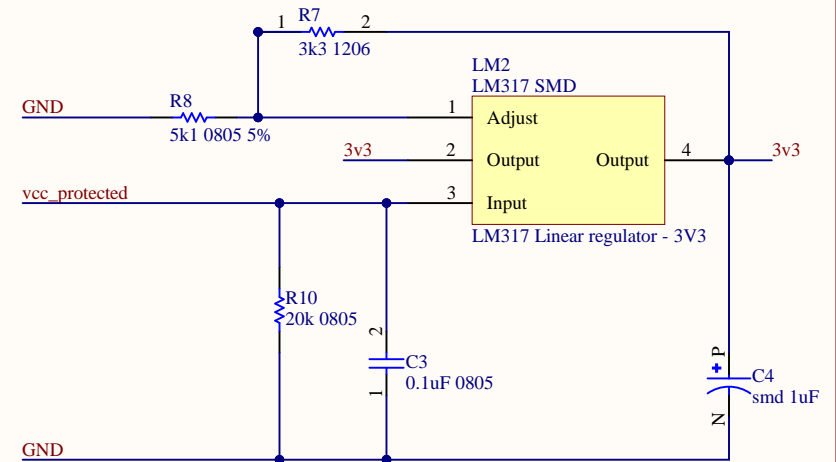
## VCC Protection



## Linear Regulator 5V



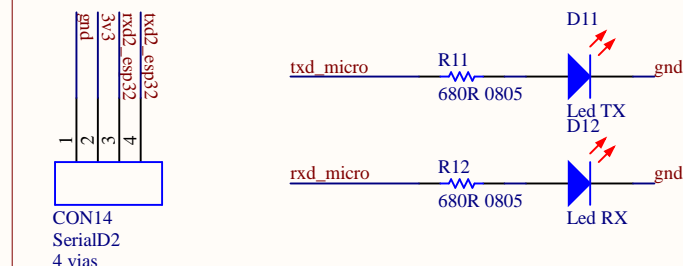
## Linear Regulator 3V3



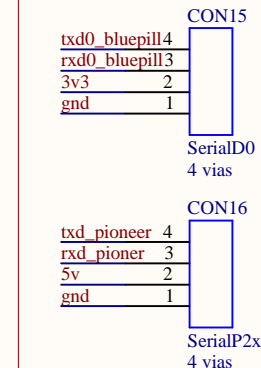
Title **pioneer\_2-bluepill\_eletronic\_wrapper-supply**

Size	Number	Revision
A		
Date:	1/29/2025	Sheet of
File:	C:\Users\...\pioneer_2-bluepill_eletronic_wrapper-supply.SchDoc	

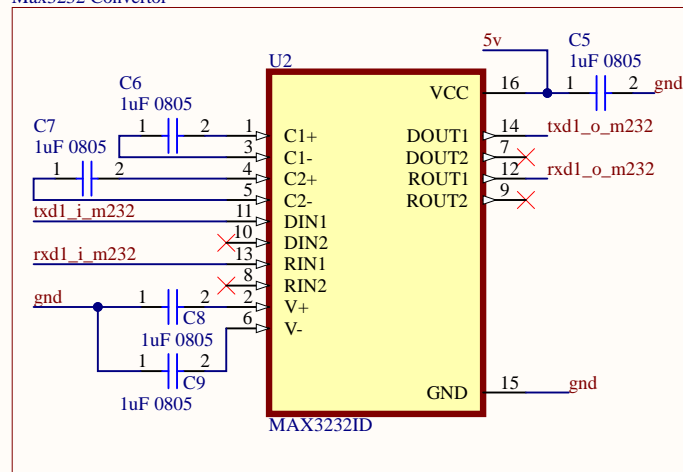
## Serial



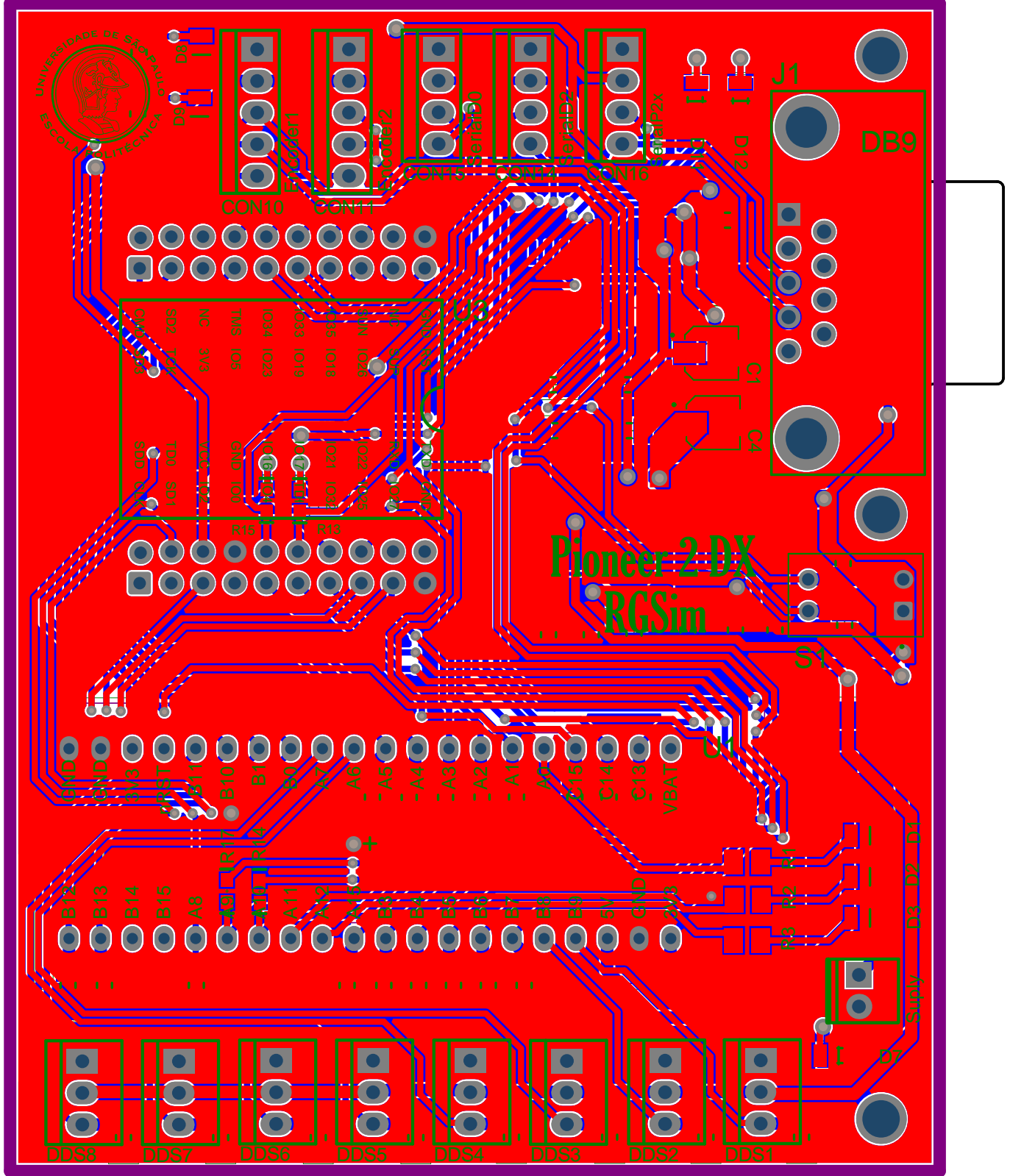
## Serial



## Max3232 Convertor



Size A	Number	Revision
Date:	1/29/2025	Sheet of
File:	C:\Users\...pioneer_2-bluepill_electronic_w...communication.SchDoc	



Comment	Description	Designator	Footprint	LibRef	Quantity
smd 1uF	Aluminum Organic Polymer Capacitors smd 50volts 1uF	C1, C4	CAP_EEE1HA2R2SR	Cap. Elet. smd 1uF 50V	2
0.1uF 0805	capacitor 0805	C2, C3	CAPACITOR 0805	CAP 0805	2
1uF 0805	capacitor 0805	C5, C6, C7, C8, C9	CAPACITOR 0805	CAP 0805	5
DDS1	Conector KK 2.54mm 3 vias	CON1	KK_3vias_180º	KK_2.54_3vias	1
DDS2	Conector KK 2.54mm 3 vias	CON2	KK_3vias_180º	KK_2.54_3vias	1
DDS3	Conector KK 2.54mm 3 vias	CON3	KK_3vias_180º	KK_2.54_3vias	1
DDS4	Conector KK 2.54mm 3 vias	CON4	KK_3vias_180º	KK_2.54_3vias	1
DDS5	Conector KK 2.54mm 3 vias	CON5	KK_3vias_180º	KK_2.54_3vias	1
DDS6	Conector KK 2.54mm 3 vias	CON6	KK_3vias_180º	KK_2.54_3vias	1
DDS7	Conector KK 2.54mm 3 vias	CON7	KK_3vias_180º	KK_2.54_3vias	1
Encoder1	holes 2.54mm 5 vias	CON10	5vias	2.54_5vias	1
Encoder2	holes 2.54mm 5 vias	CON11	5vias	2.54_5vias	1
Suply	Conector KK 2.54mm 2 vias	CON12	KK_2VIAS_180º	KK_2.54_2vias	1
DDS8	Conector KK 2.54mm 3 vias	CON13	KK_3vias_180º	KK_2.54_3vias	1
SerialD2	holes 2.54mm 4 vias	CON14	4vias	2.54_4vias	1
SerialD0	holes 2.54mm 4 vias	CON15	4vias	2.54_4vias	1
SerialP2x	holes 2.54mm 4 vias	CON16	4vias	2.54_4vias	1
LED 3MM RED	LED 3MM RED	D1, D2, D3, D7	LED RED	LED 3MM RED	4
Diode M7	Diode, SMA, 1000V, 1A, 150°C	D4, D5, D6	DIOM505270X240	Diode M7	3
Led esp supply	LED 3MM RED	D8	LED RED	LED 3MM RED	1
Led state	LED 3MM RED	D9	LED RED	LED 3MM RED	1
Led TX	LED 3MM RED	D11	LED RED	LED 3MM RED	1
Led RX	LED 3MM RED	D12	LED RED	LED 3MM RED	1
DB9	Cable Grip 0.38 ~ 0.50 (9.5mm ~ 12.7mm) Aluminum - Silver	J1	*DB9_DB9(Primary)	DB9	1
LM317 Linear regulator - 5V	SOT223	LM1	SOT-223-2	lm317 smd	1
LM317 Linear regulator - 3V3	SOT223	LM2	SOT-223-2	lm317 smd	1
Trans BC817	Transistor BJT NPN BC817-25-7-F	Q1	SOT96P240X110-3N	Trans BC817	1
680R 0805	0805	R1, R2, R3, R9, R11, R12, R22, R23	RESISTOR 0805	RES 0805 5%	8
1k 1206	RES 1206 5%	R4	RESC3216X60N	RES 1206	1
3k 0805	0805	R5	RESISTOR 0805	RES 0805 5%	1
20k 0805	0805	R6, R10, R18, R19, R20, R21, R24, R28, R33, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57	RESISTOR 0805	RES 0805 5%	29
3k3 1206	RES 1206 5%	R7	RESC3216X60N	RES 1206	1
5k1 0805 5%	0805	R8	RESISTOR 0805	RES 0805 5%	1
0R	0603	R13, R14, R15, R16, R17, R29, R30, R31, R32, R34, R35, R36, R37	RESISTOR 0603	RES 0603 5%	13
2K2 1206	RES 1206 5%	R25, R26, R27	RESC3216X60N	RES 1206	3
dip switch 2 channel	DS02-254-2L-02BE	S1	SW_DS02-254-2L-02BE	dip switch 2 channel	1
BluePill	BluePill - STMDuino (STM32F103)	U1	BluePill	CMP-010-000000-1	1
MAX3232ID	3-V to 5.5-V multichannel RS-232 line driver & receiver 16-SOIC -40 to 85	U2	SOIC127P600X175-16N	MAX3232ID	1
Small case to esp32 d1 mini	ESP32 D1 Mini	U3	ESP32 D1 MINI	ESP32 D1 Mini	1