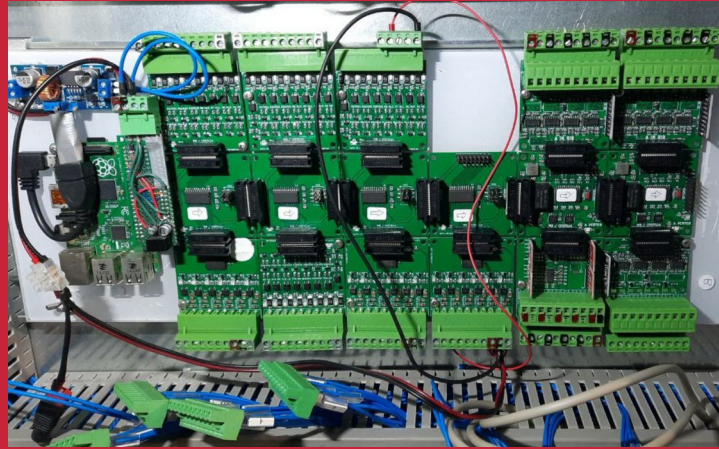


IoT-Vertebrae

Bridging OT & IT



Jordi Binefa

(Una part de la presentació feta per en Xavier Pi, Pau Quintero i Jordi Binefa)

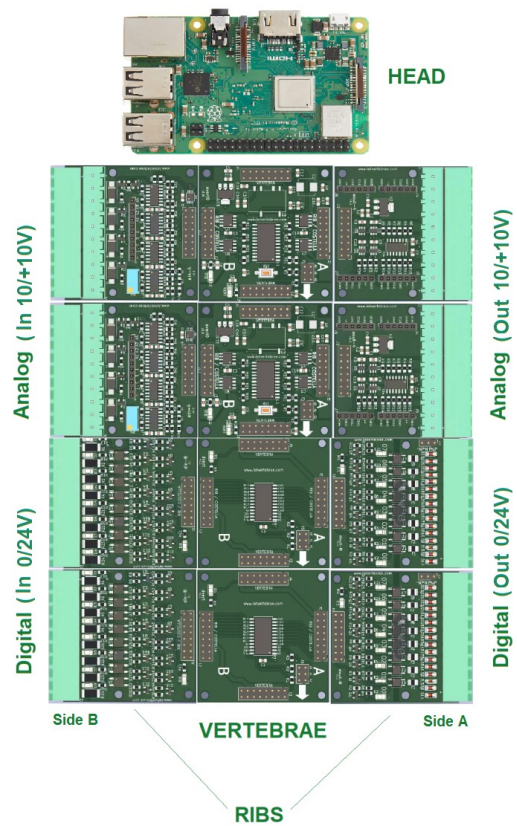
Diada de la Llibertat del Maquinari - 2023



<https://caliu.cat/post/dlm2023>

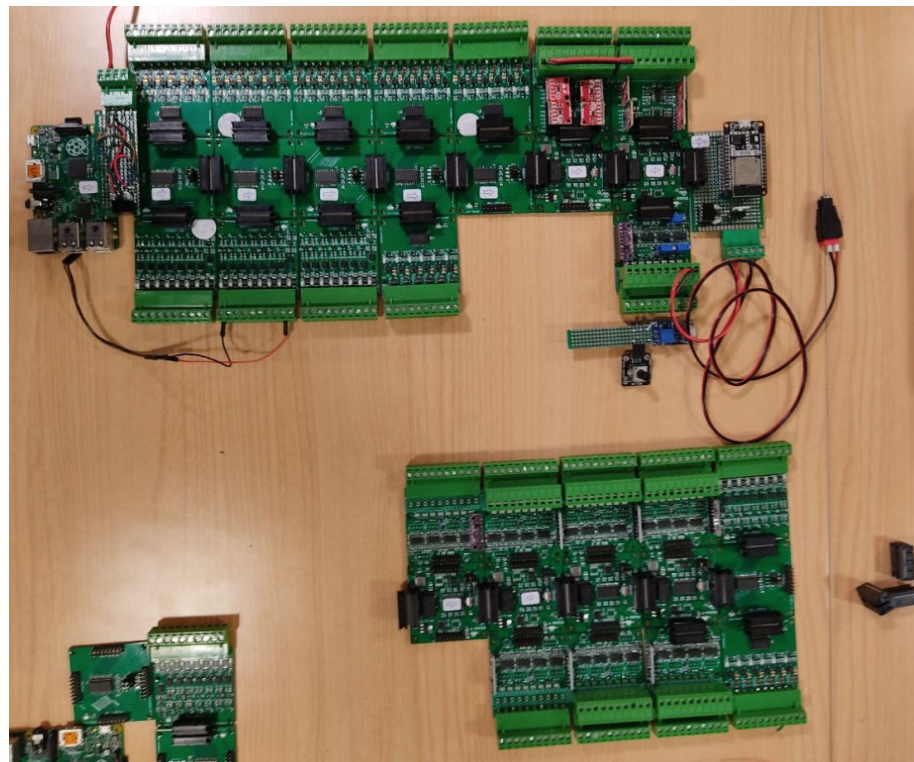


www.iotvertebrae.com



One body, up to 128 digital I/O and 64 analog I/O

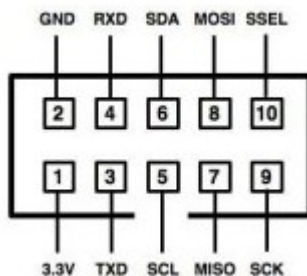
Dibuixat per en Xavier Pi



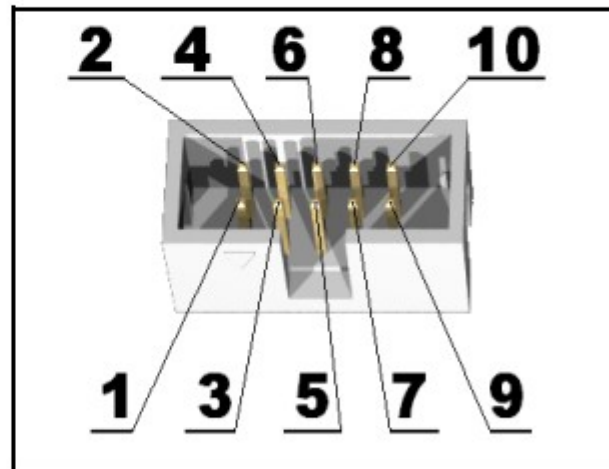
UEXT d'OLIMEX



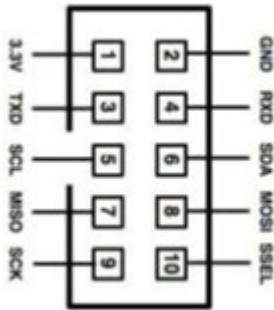
Connector pins description:



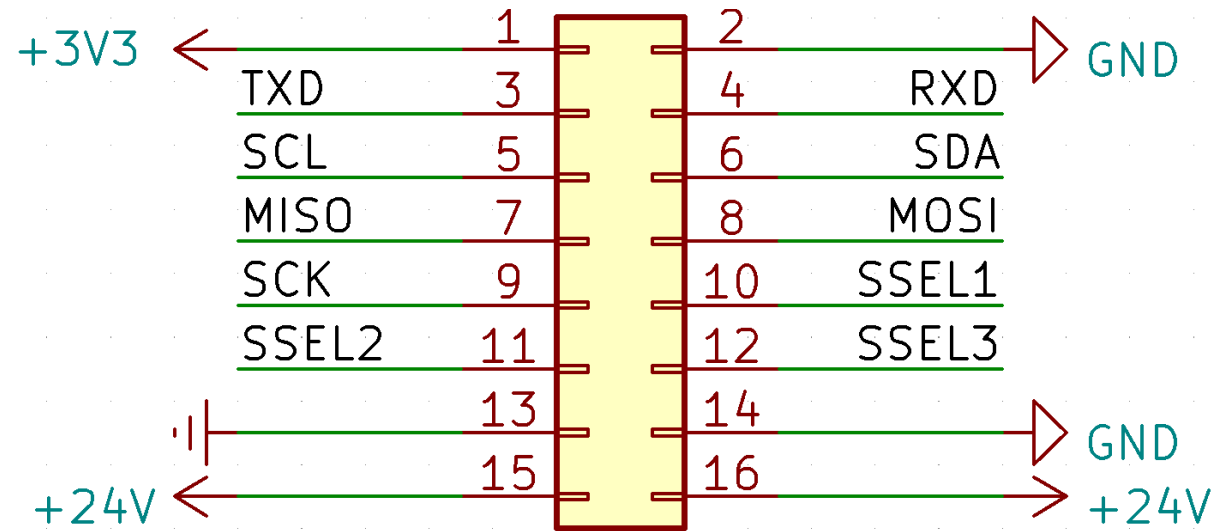
Pin #	Signal Name
1	3.3V
2	GND
3	TXD
4	RXD
5	SCL
6	SDA
7	MISO
8	MOSI
9	SCK
10	SSEL



U2EXT (UEXT estès)

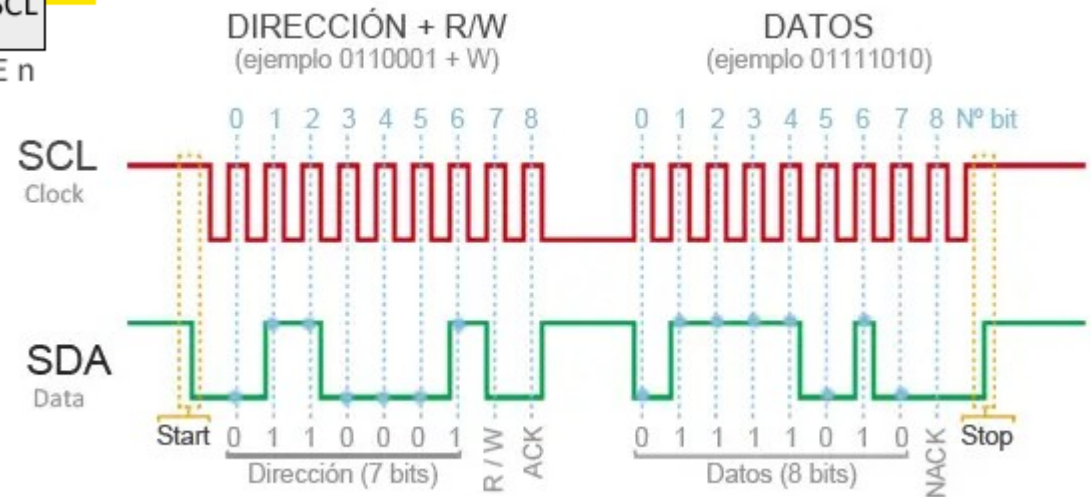
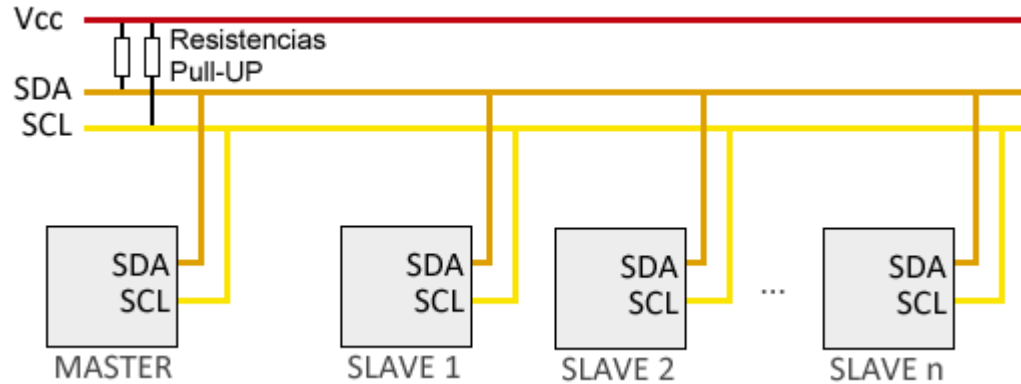


UEXT

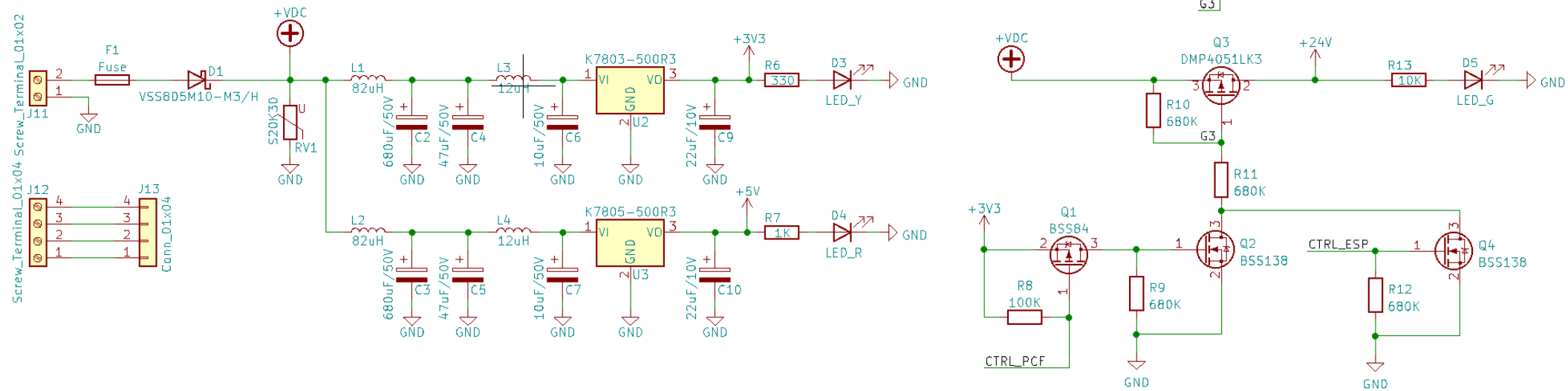


UEXT estès

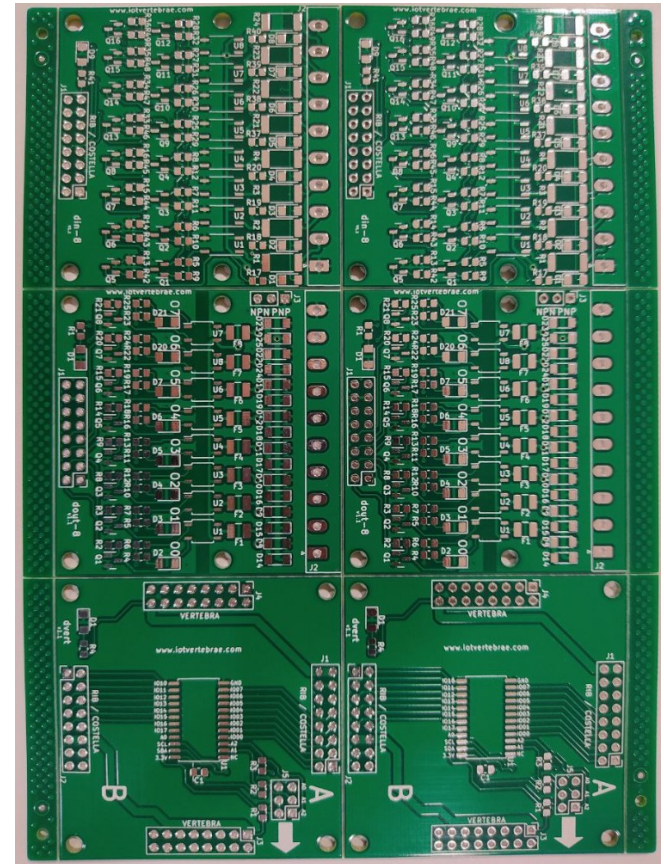
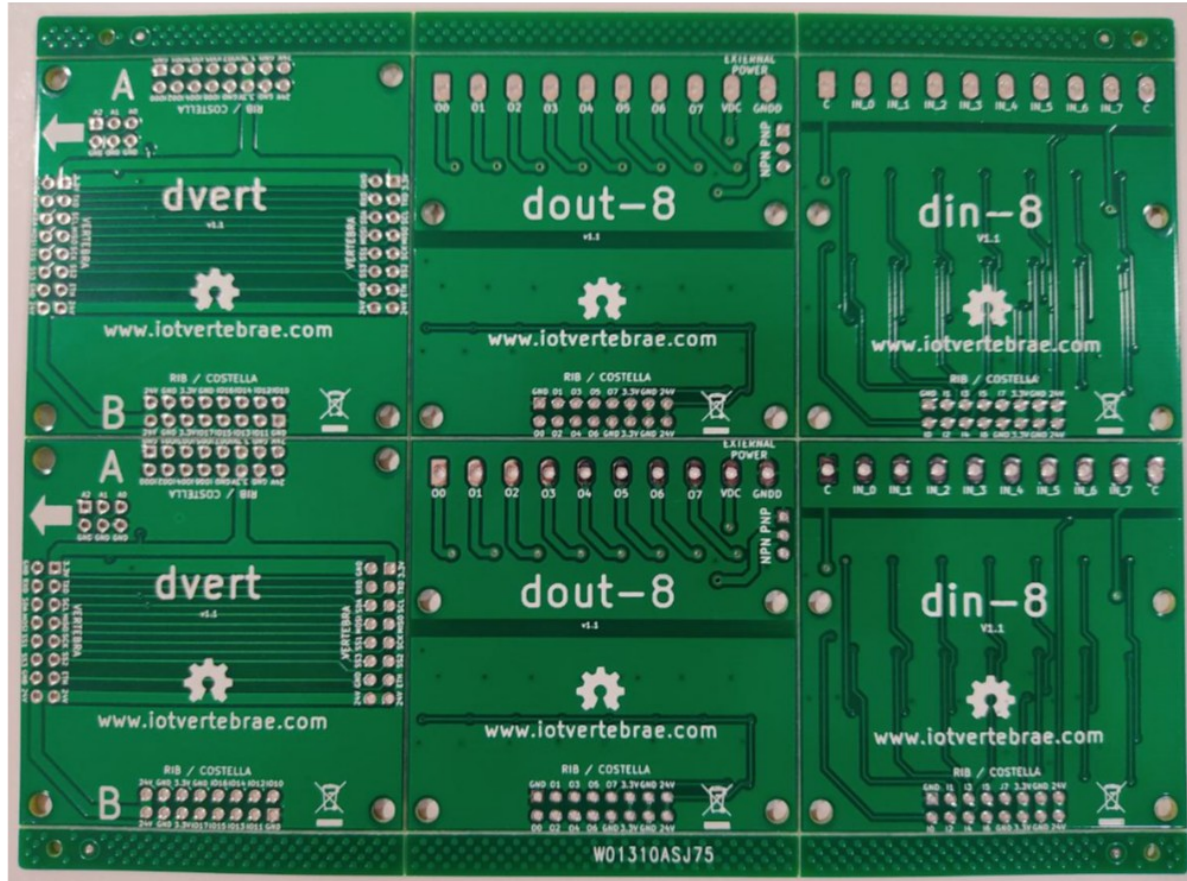
Bus I2C



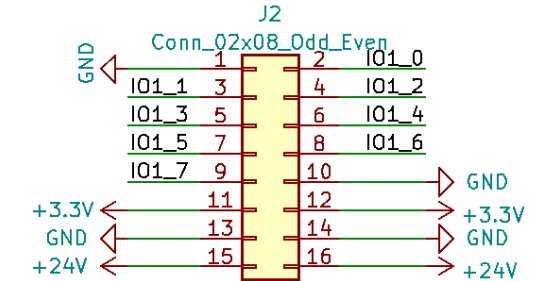
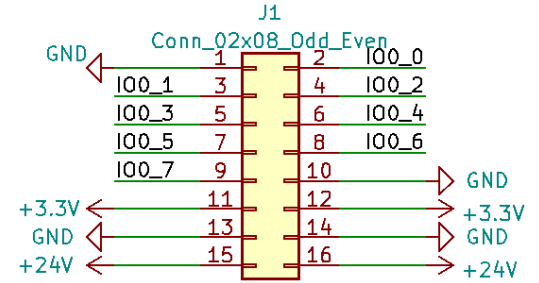
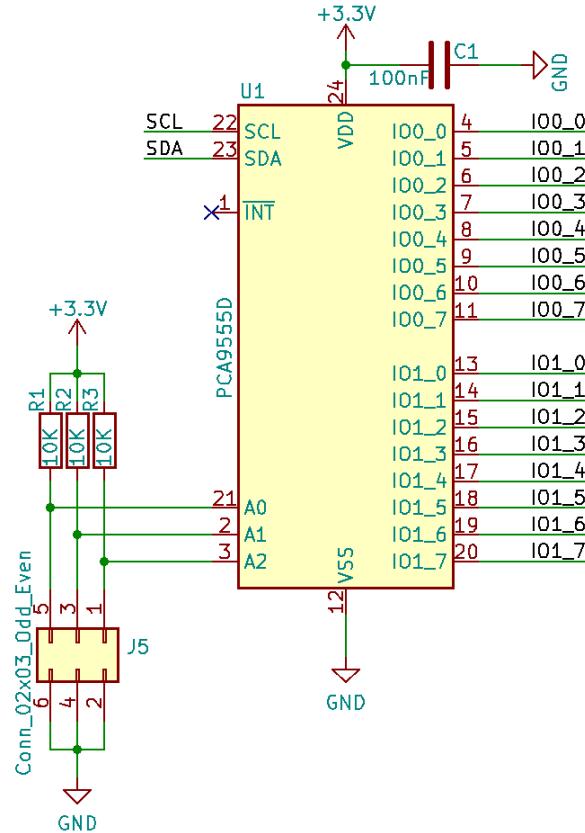
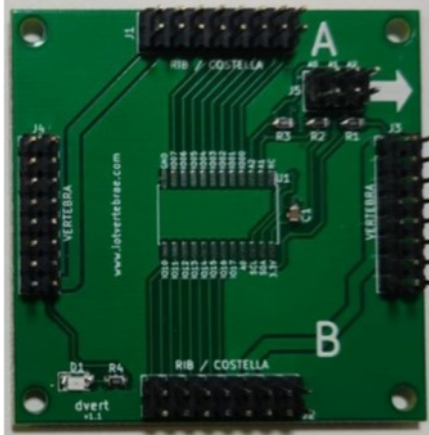
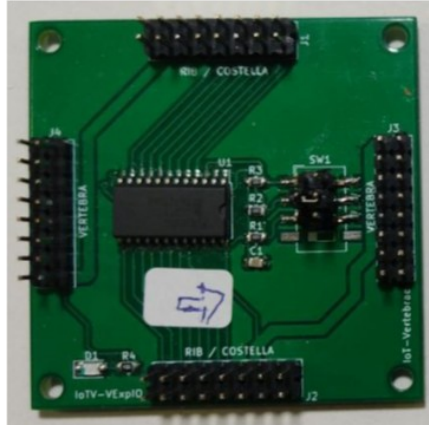
Alimentació provinent del cap



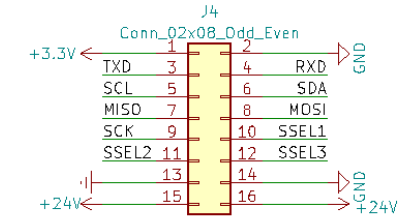
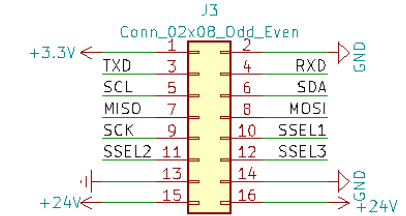
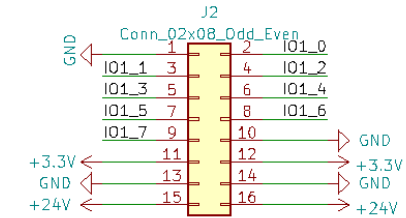
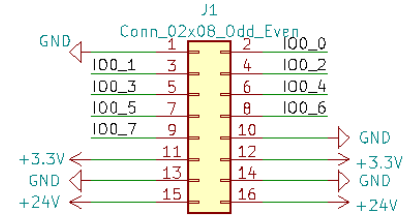
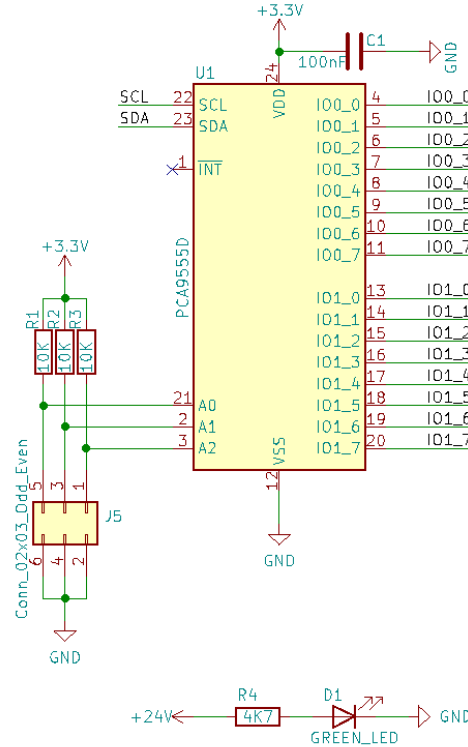
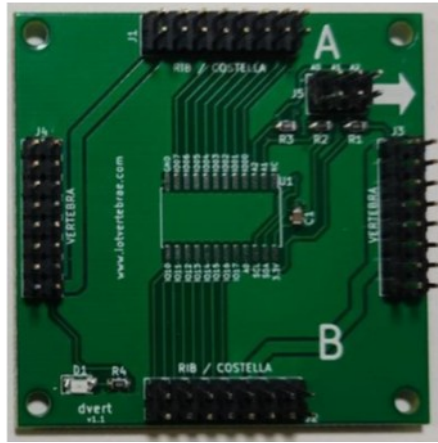
Vèrtebres i costelles digitals



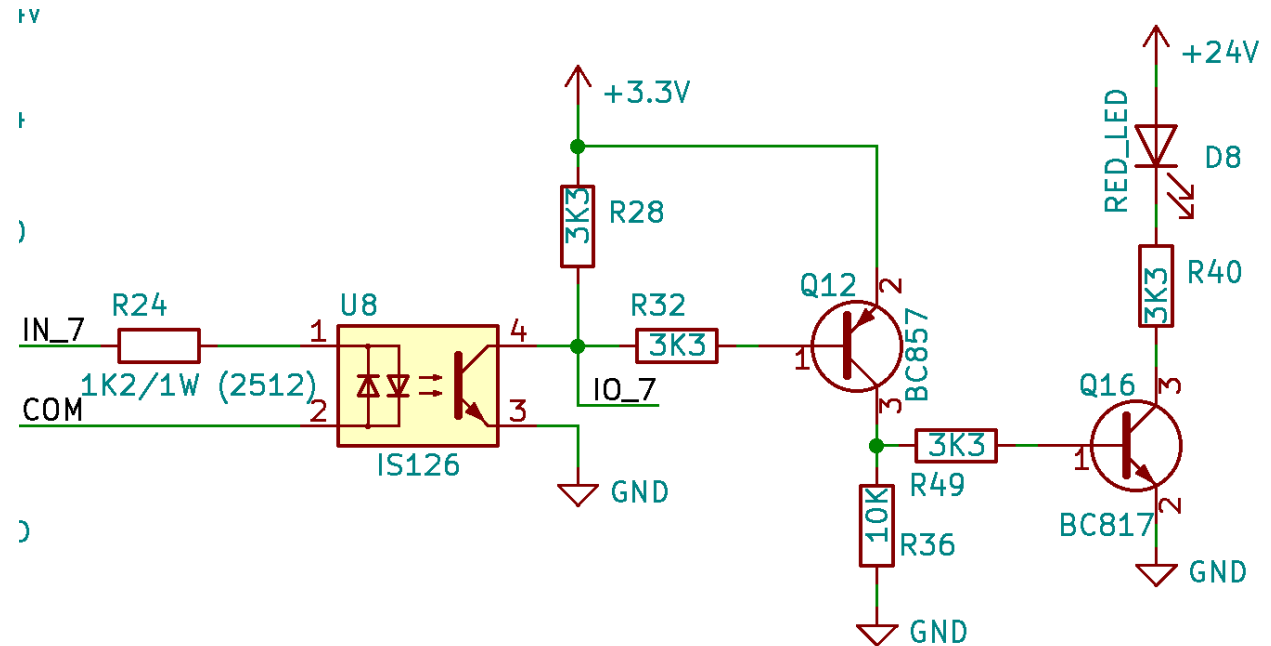
Vèrtebra digital



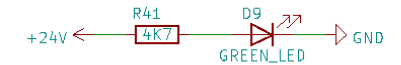
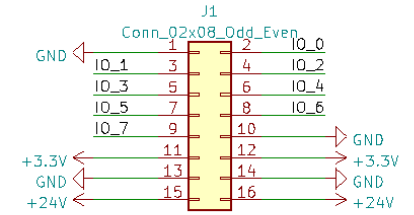
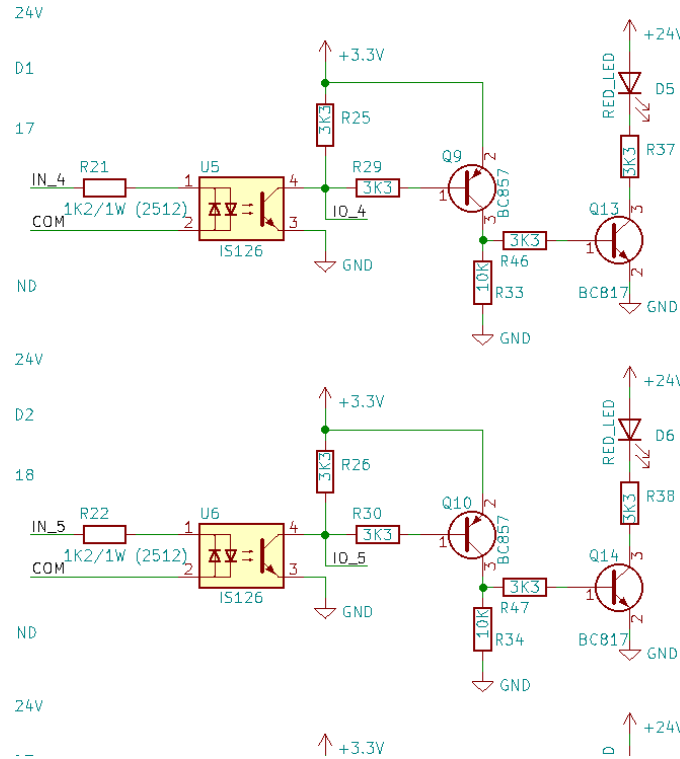
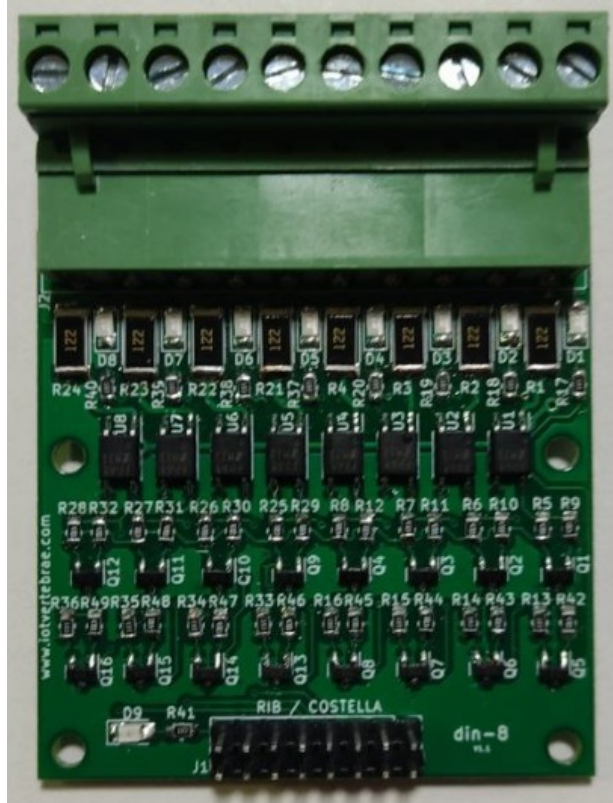
Vèrtebra digital



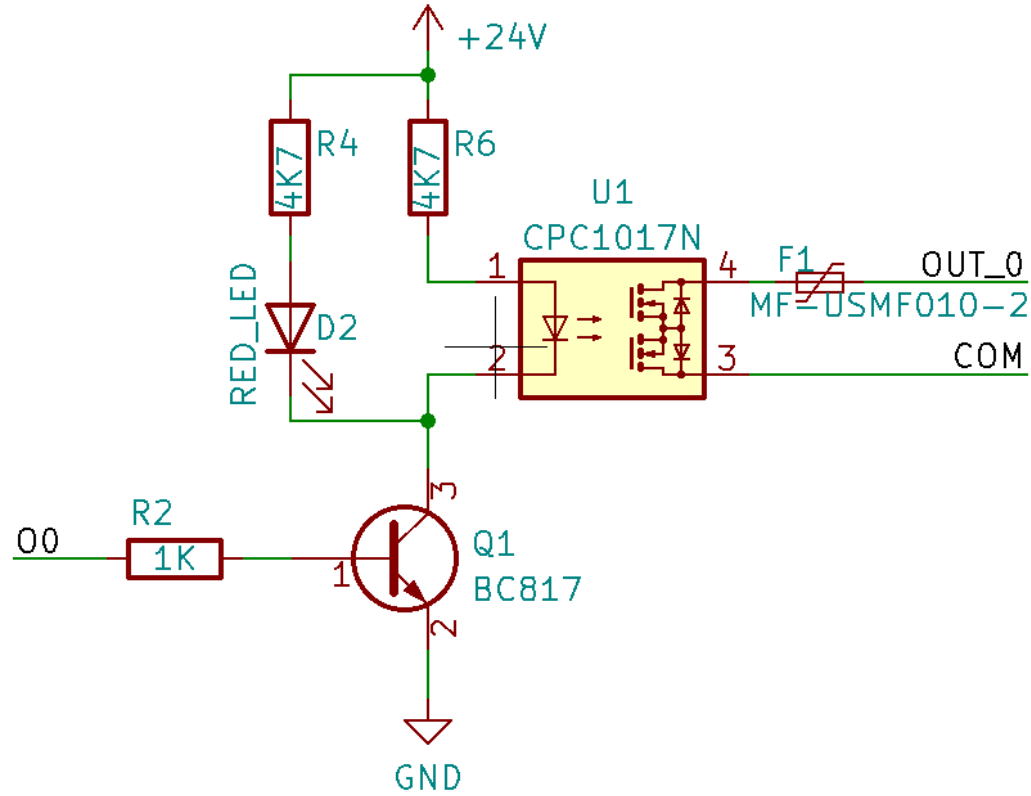
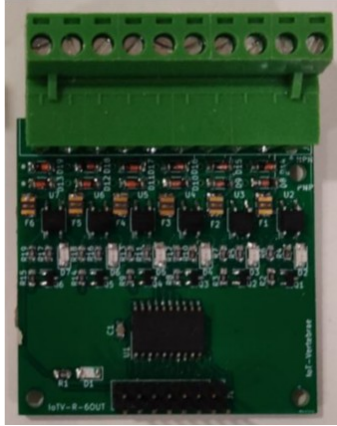
Costella d'entrades digitals



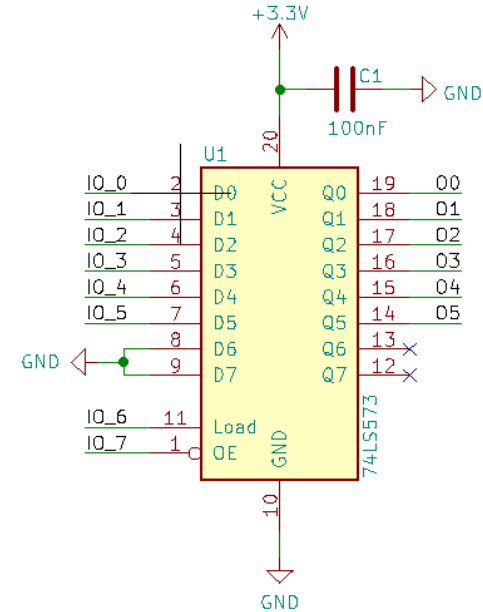
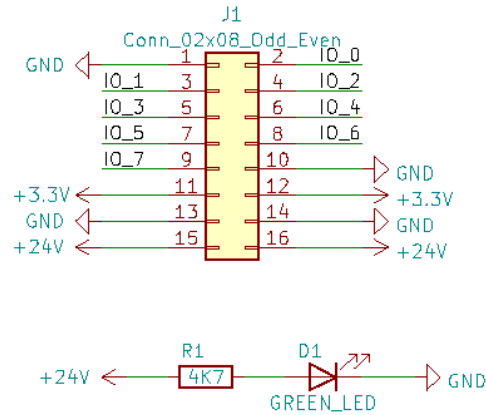
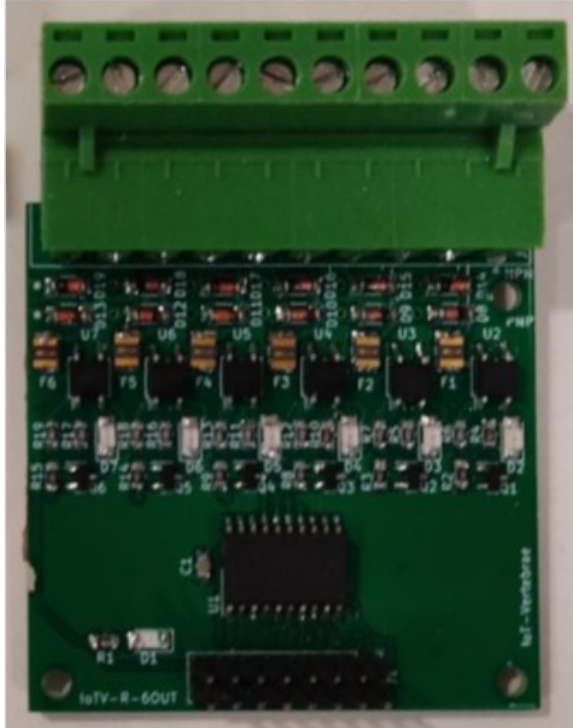
Costella d'entrades digitals



Costella de sortides digitals

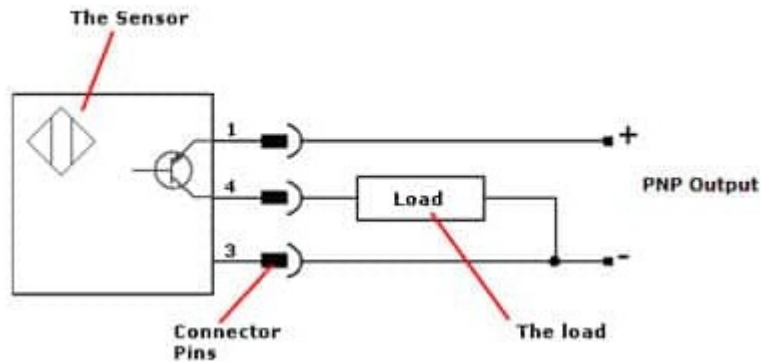


Costella de 6 sortides digitals (v1.0)

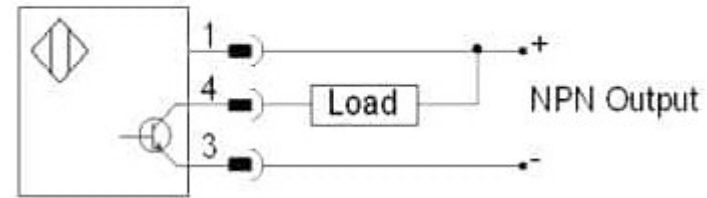


Sortides PNP i NPN

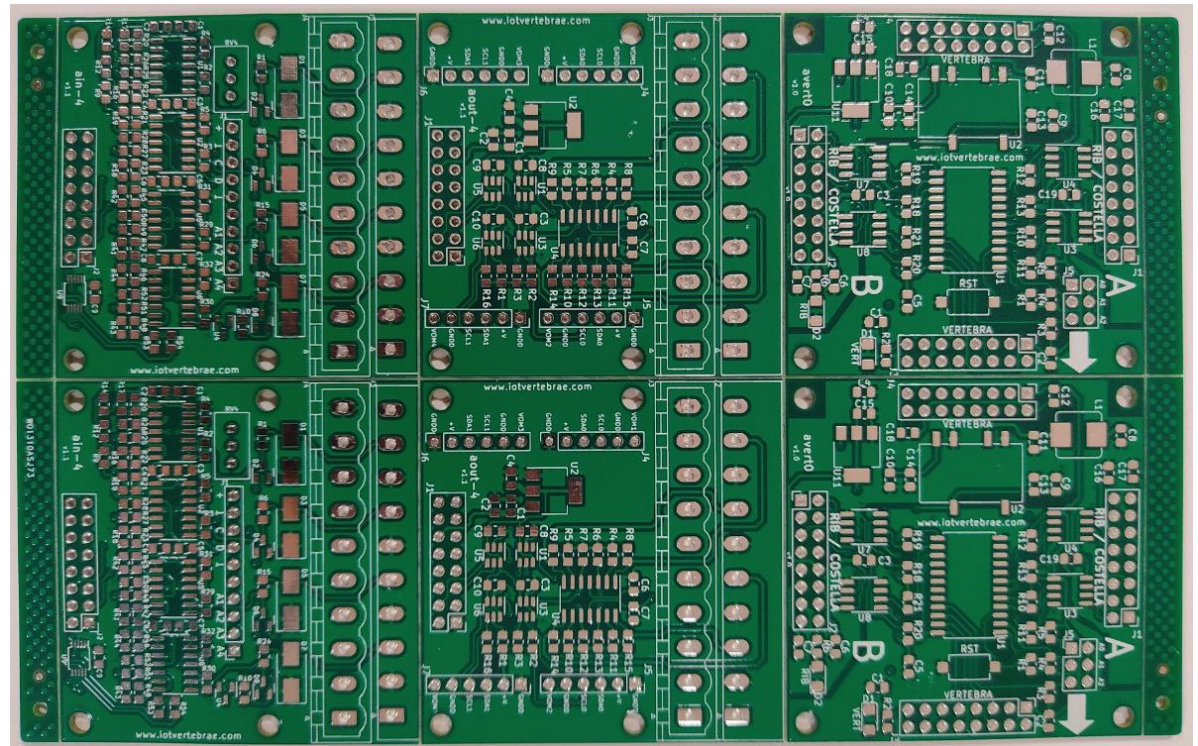
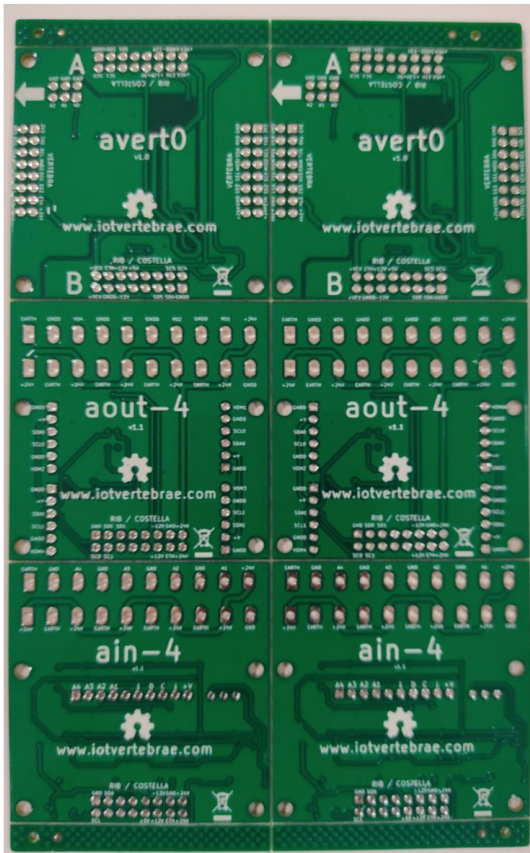
PNP 3-wire Standard Diagram



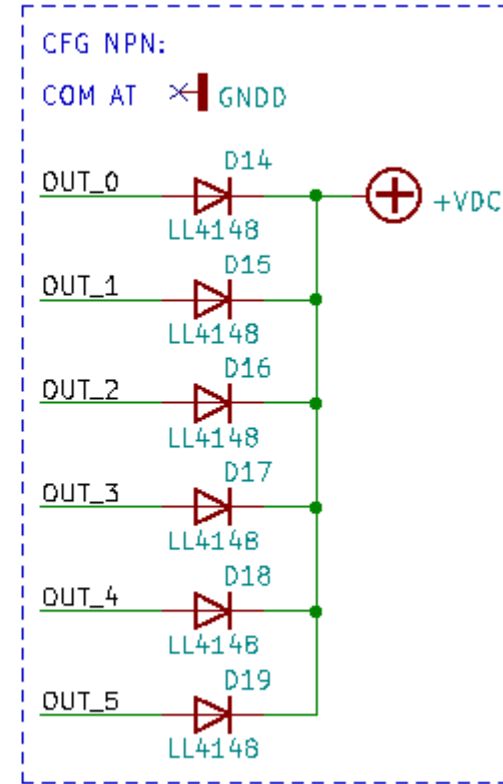
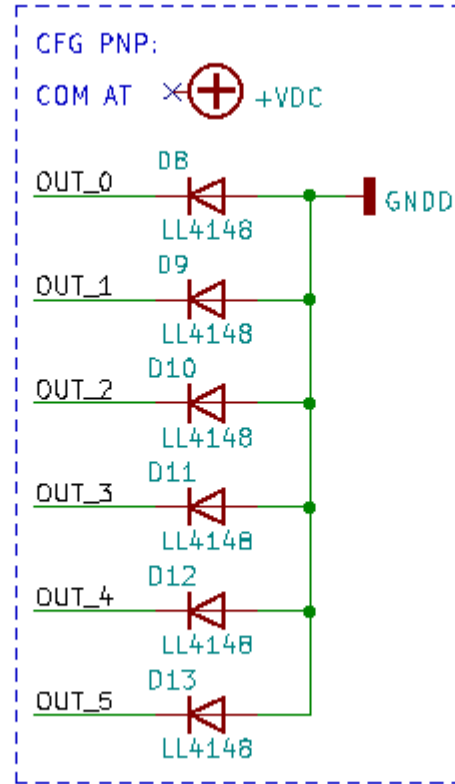
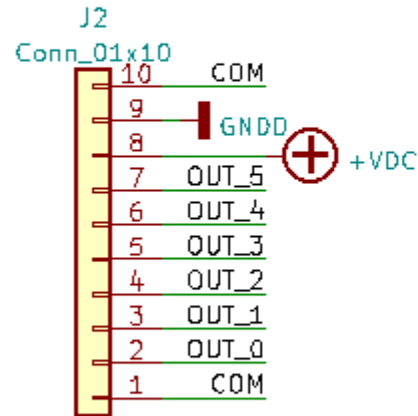
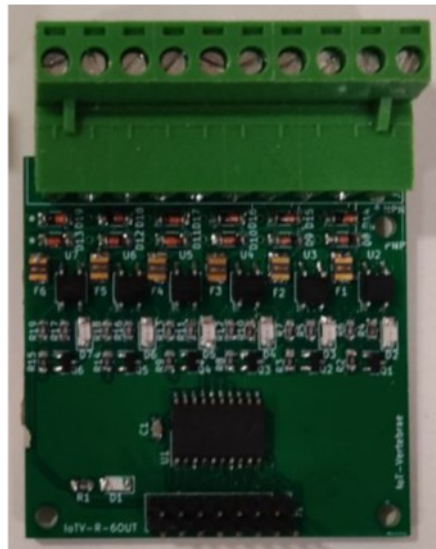
NPN 3-wire Standard Diagram



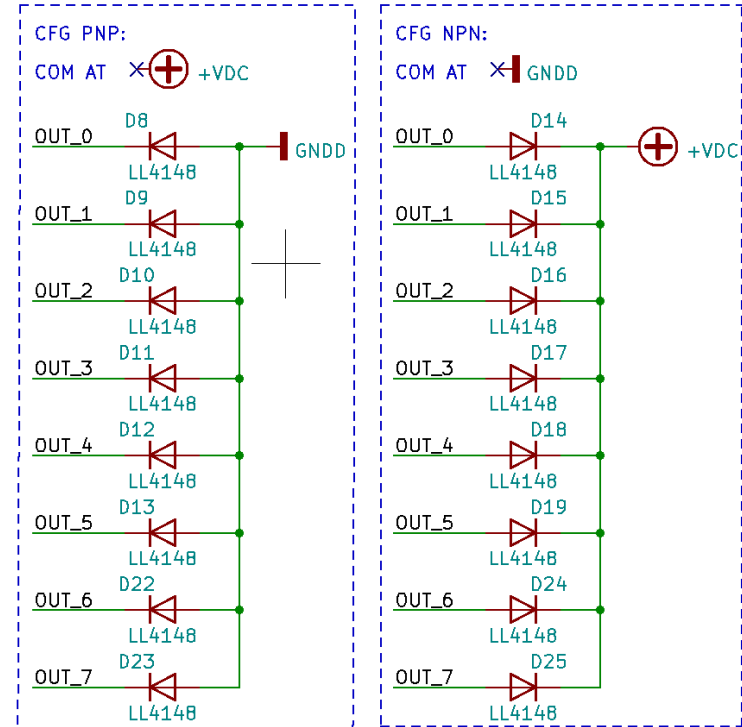
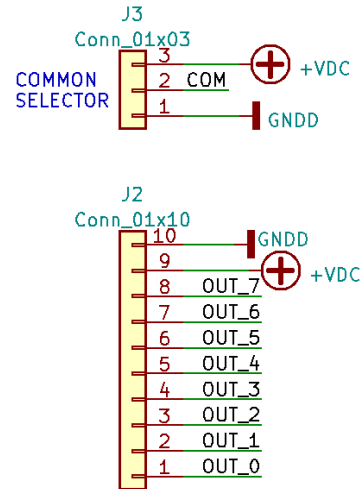
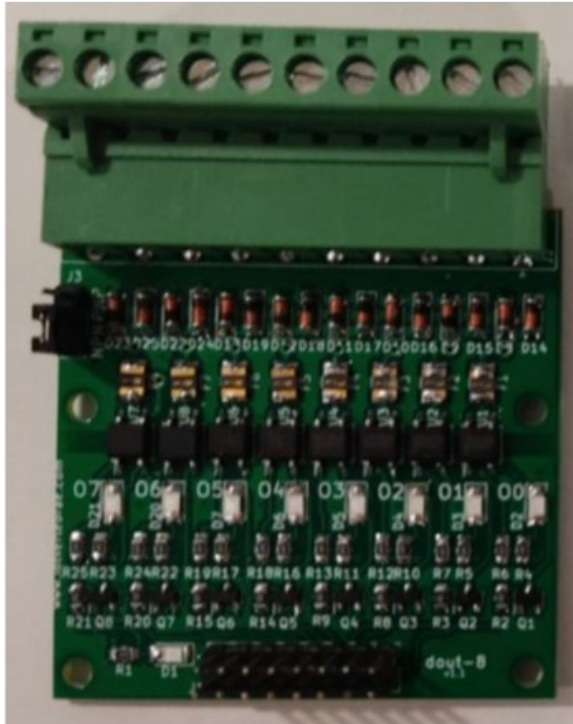
Vèrtebres i costelles analògiques



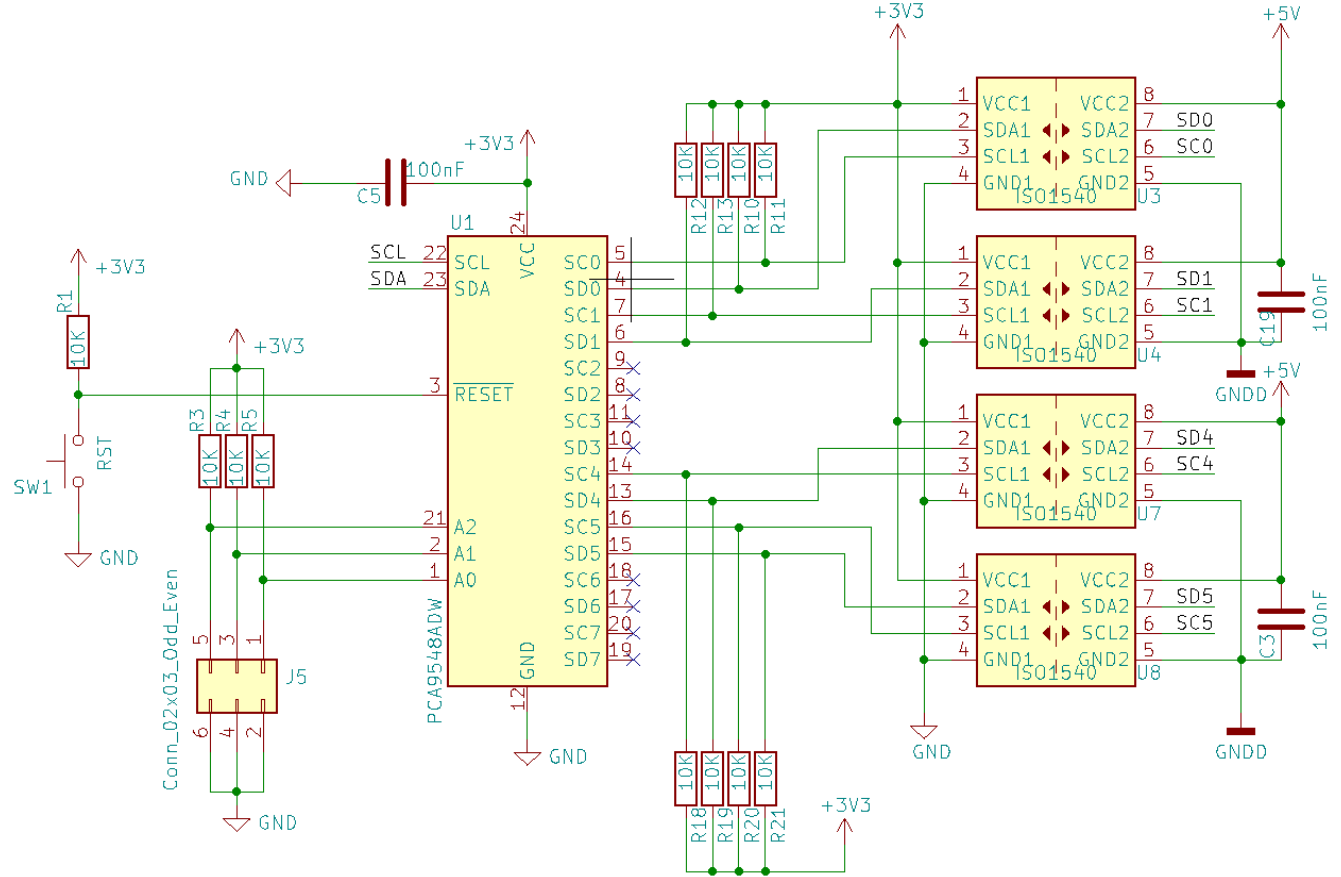
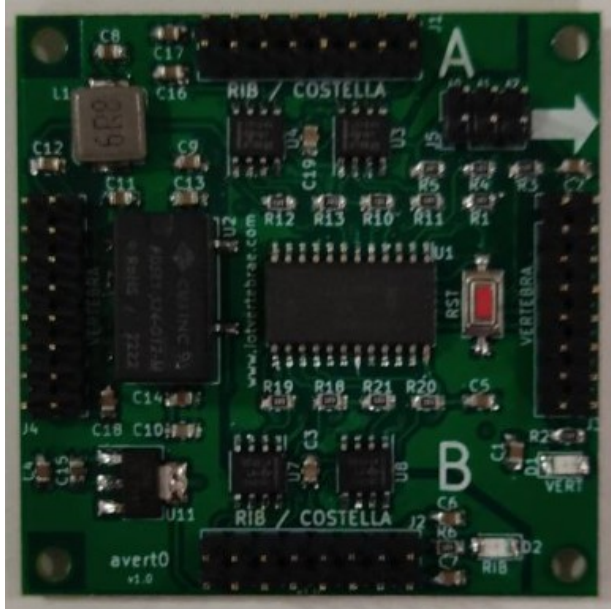
Costella de 6 sortides digitals (v1.0)



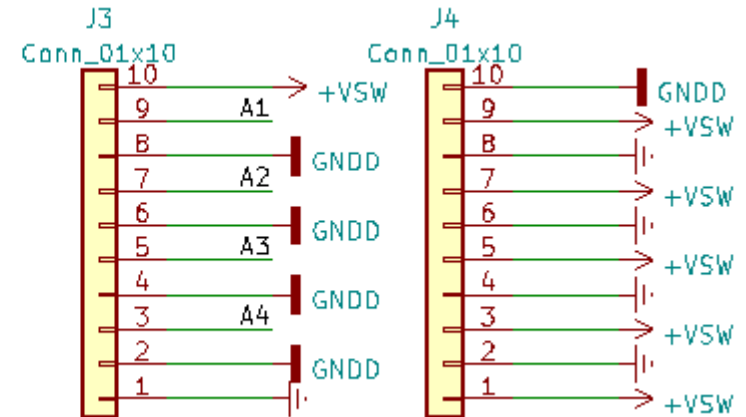
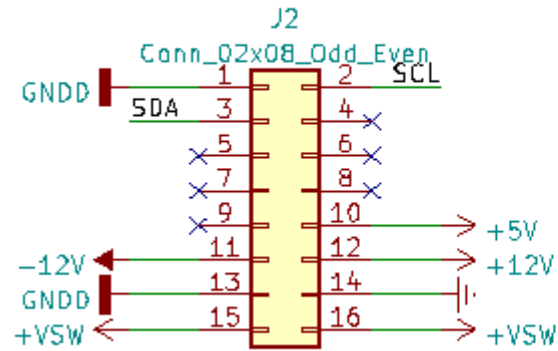
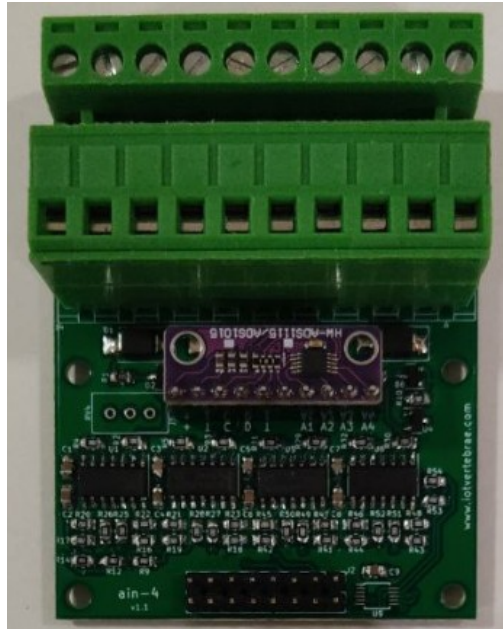
Costella de 8 sortides digitals (v1.1)



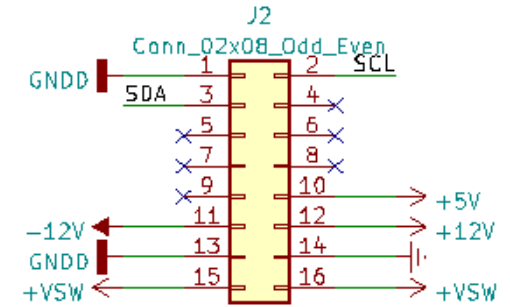
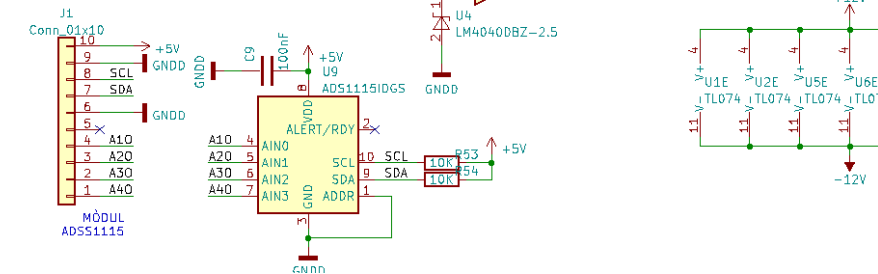
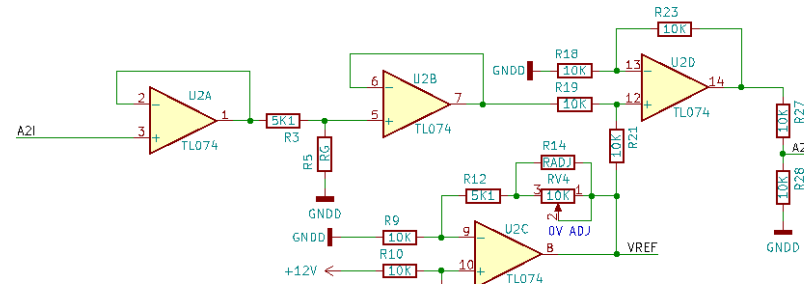
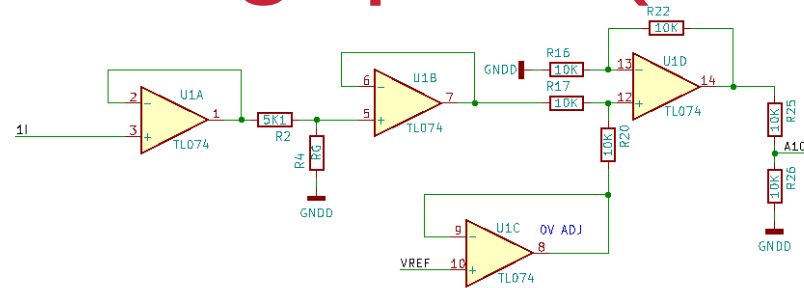
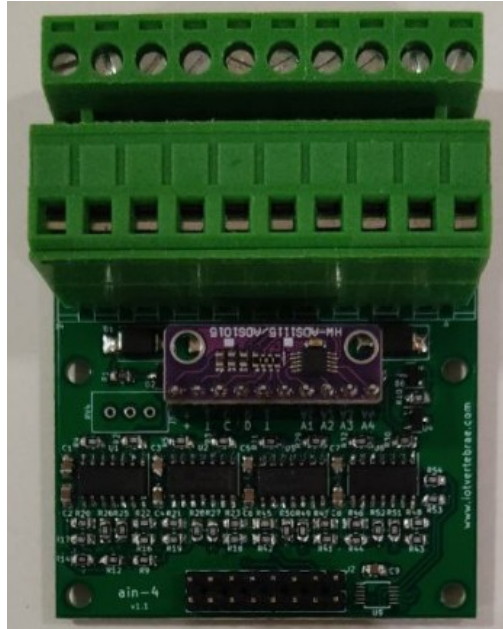
Vèrtebra analògica



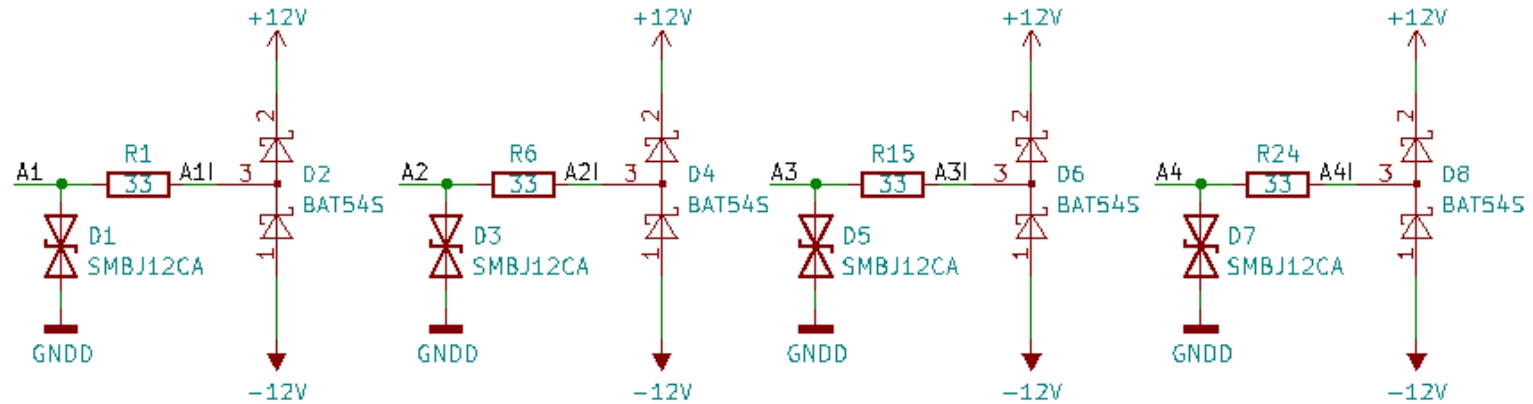
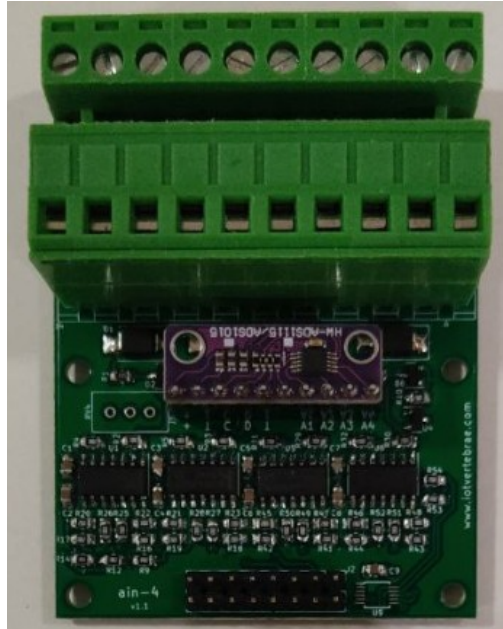
4 entrades analògiques (-10V a 10V)



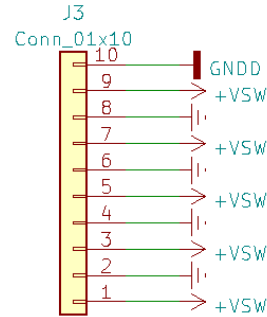
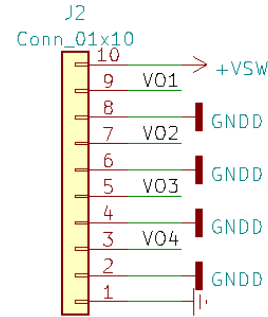
4 entrades analògiques (-10V a 10V)



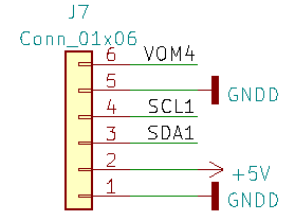
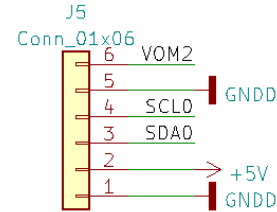
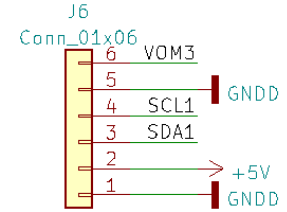
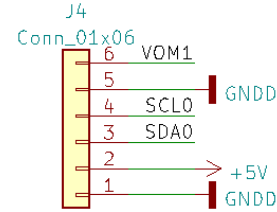
4 entrades analògiques (-10V a 10V)



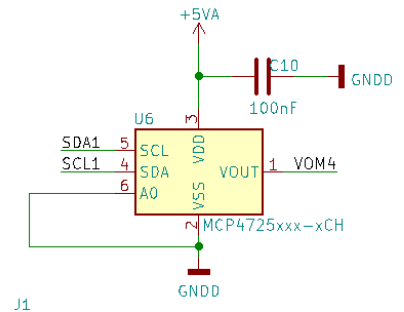
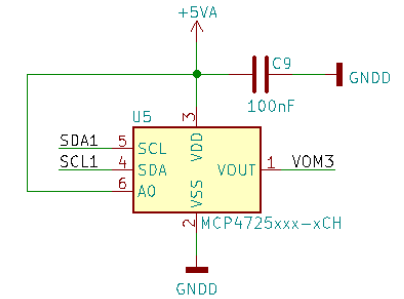
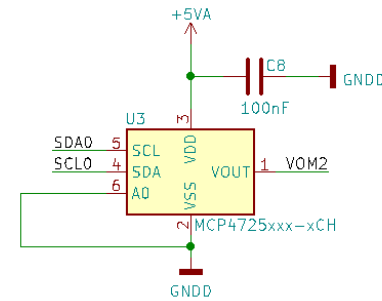
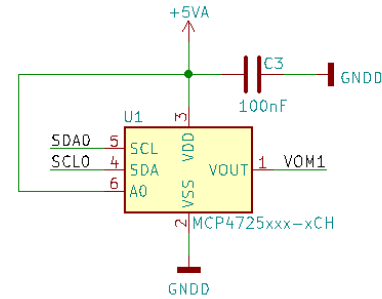
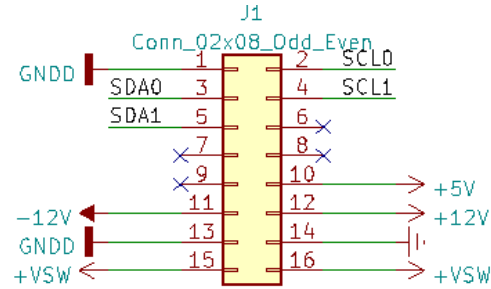
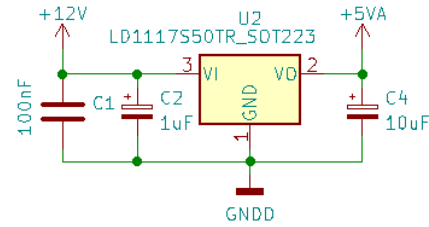
4 sorties analogiques (0 a 10V)



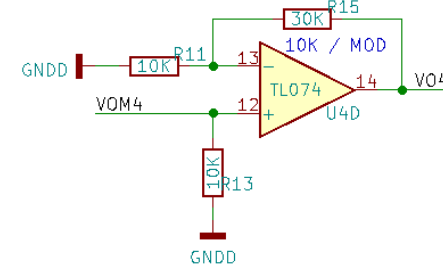
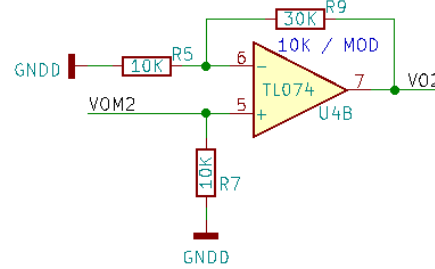
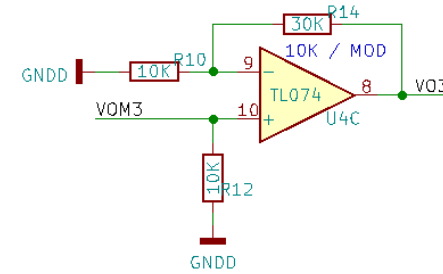
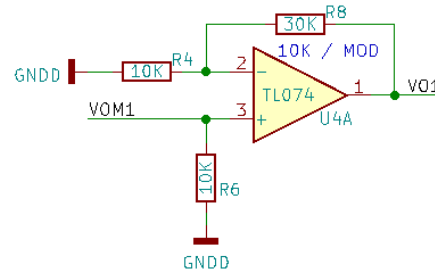
MOD (EXTERNAL MCP4725 MODULES)



4 sorties analogiques (0 a 10V)



4 sorties analogiques (0 a 10V)



Torn de preguntes, dubtes i suggeriments

how who how ? where ? when !
what ! when why
how who what how why
Questions!
? ! ? how where who how where
who ! why what when how how what why ?
? how when ? why ! ! where ! when

