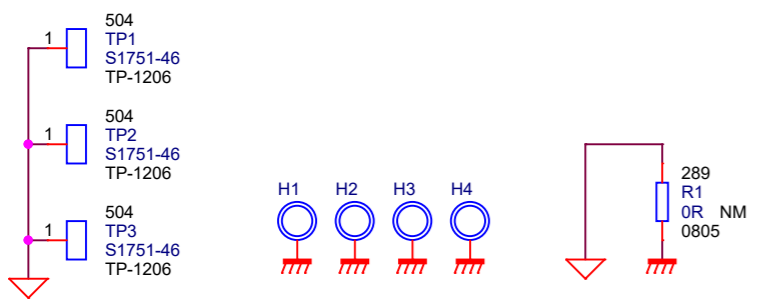


# Revisions history

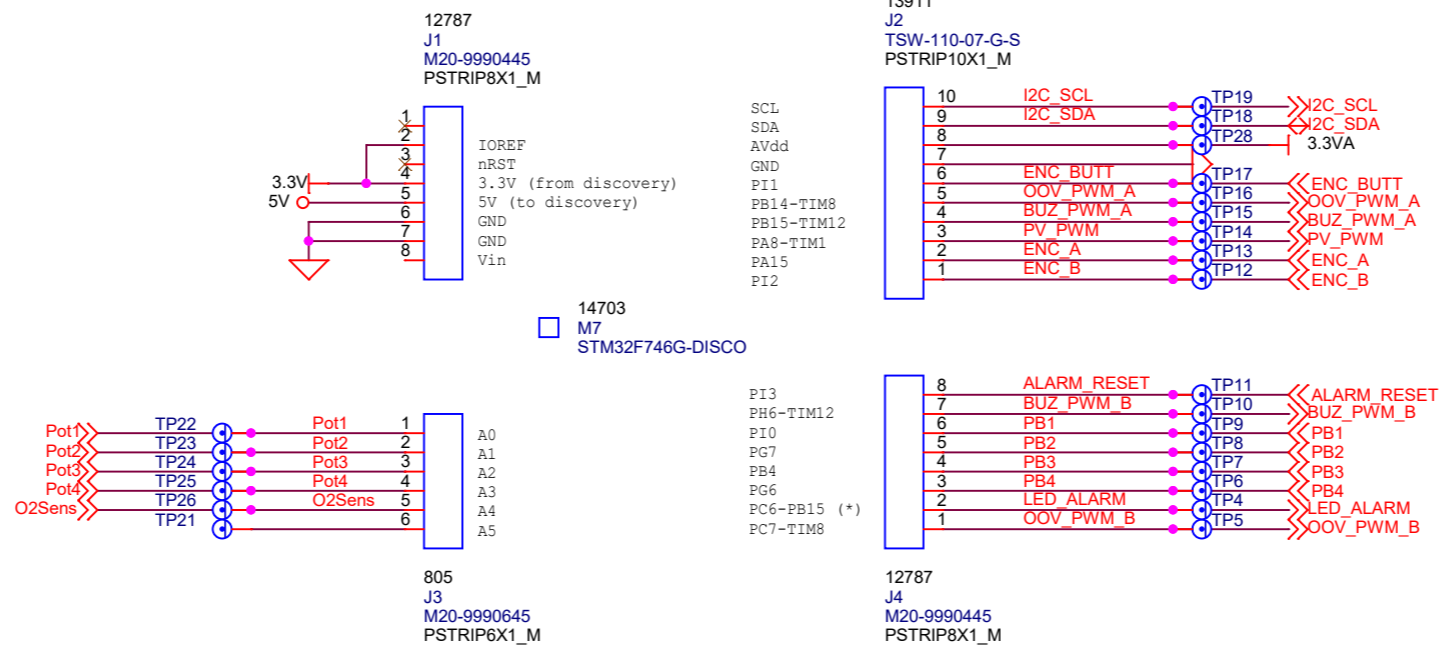
Rev.	Date	Description
0	04, 2020	First release

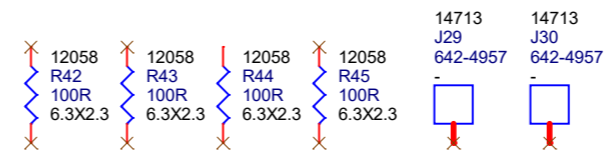
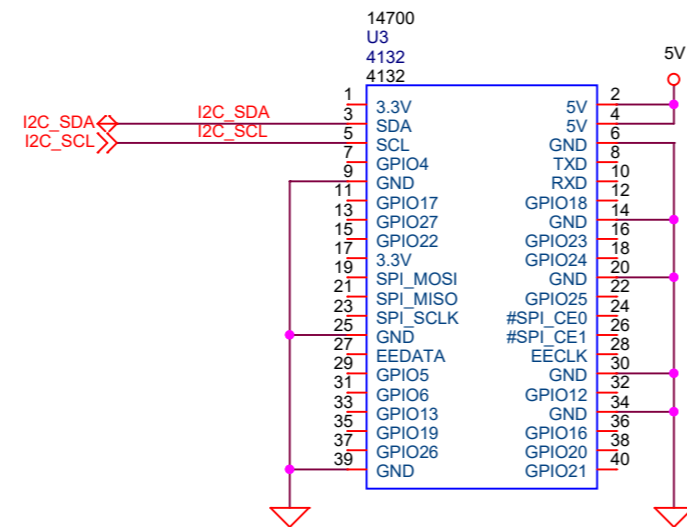


	Electronic Design Lab Via E.Melen, 83 16152 - Genova	Project: 14709 - CTR1S, Controller shield for 32F46GDISCO	
	Drawn: C.Lorini	Checked: M.Maggiali	Approved: M.Crepaldi
Document: CTR1S		01:REV.HISTORY	
Size: A3	Date: Monday, April 20, 2020	Rev. 0 Sheet 1 of 10	

IO IRQ List	
PI0	-> PB1
PI1	-> ENC BUTT
PI2	-> ENC B
PI3	-> ALARM RESET
PB4	-> PB3
-	-
PG6	-> PB4
PG7	-> PB2
-	-
PA15	-> ENC BUTT

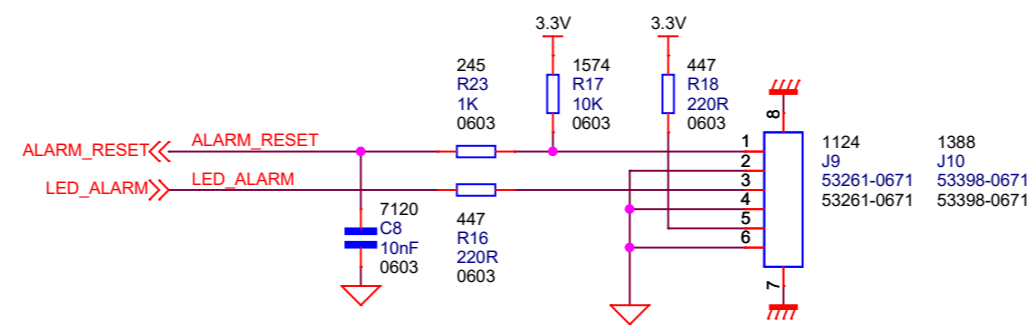
(\*) no irq



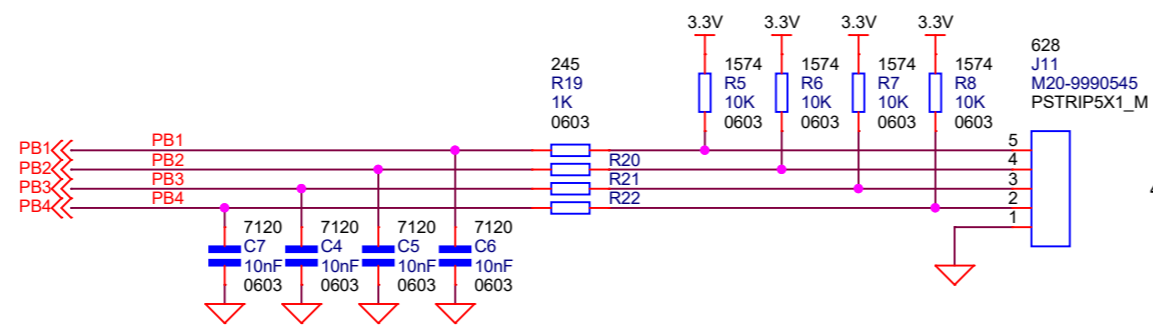


LEDs 1..4 connected to "A" connector need a 100R series resistor

set 3.3V on IOExpander IO voltage selector

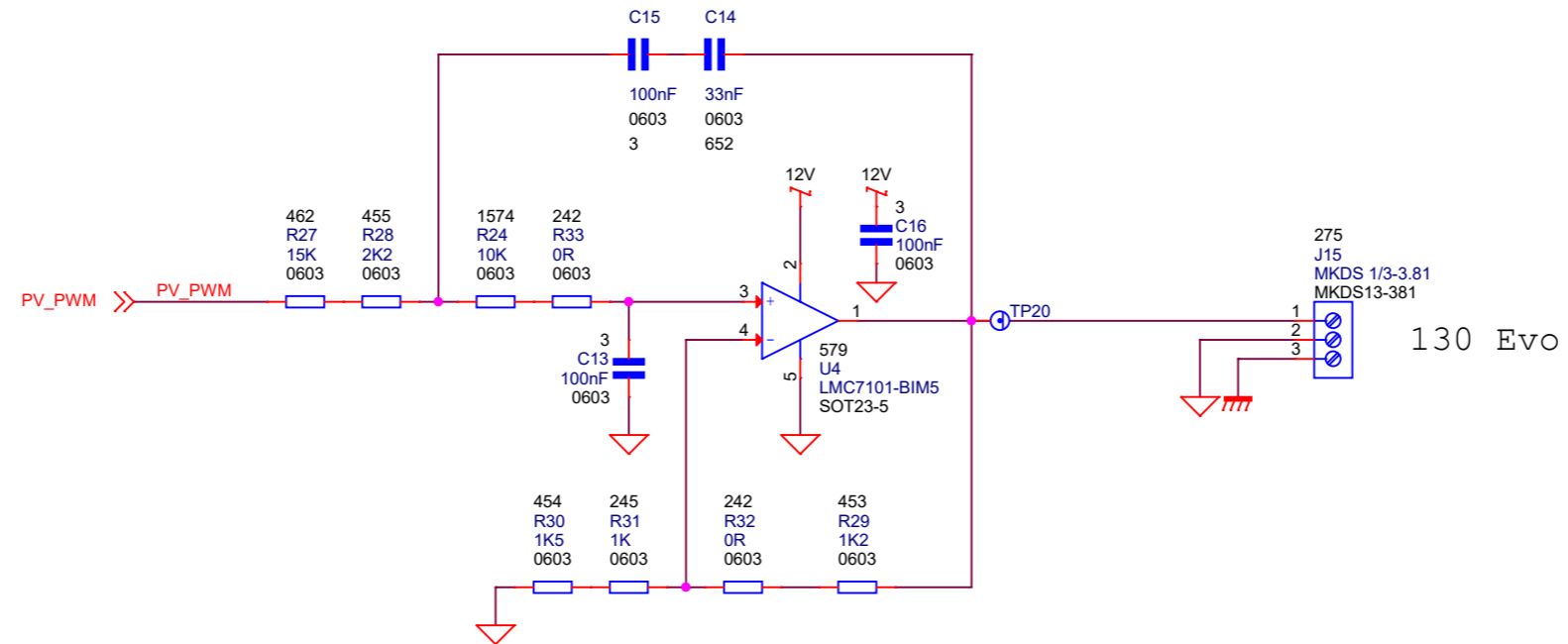


Alarm reset button  
Alarm LED  
Power LED

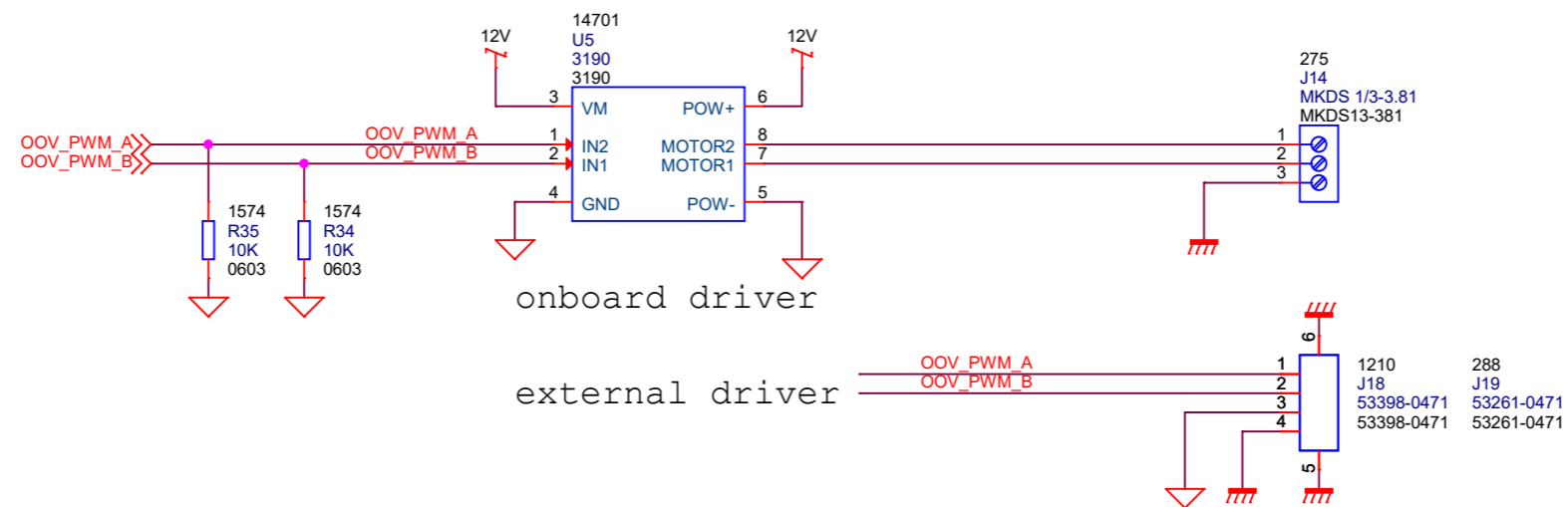


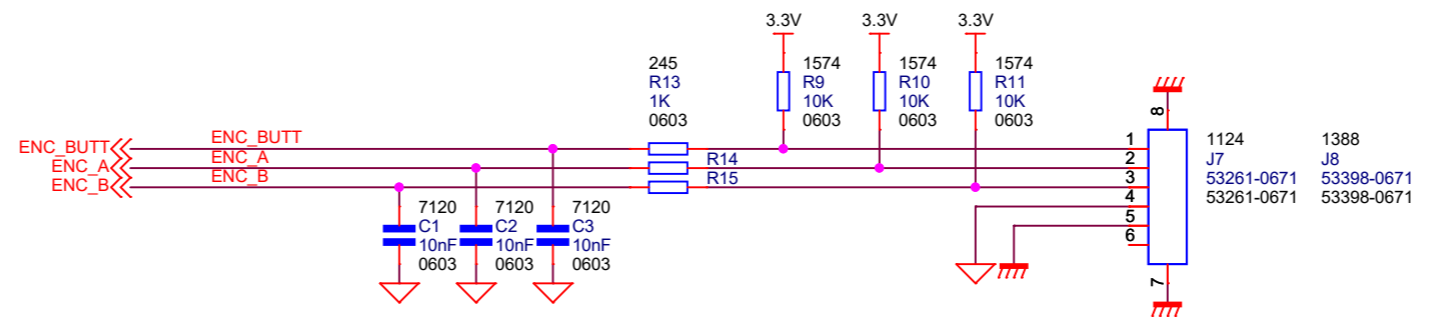
4 Button panel


Proportional valve

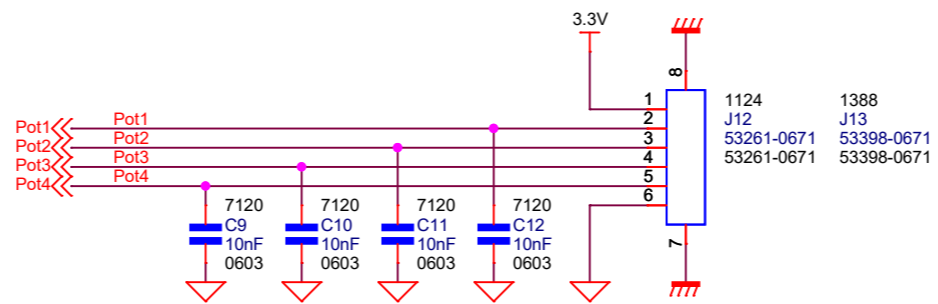



On/off valve

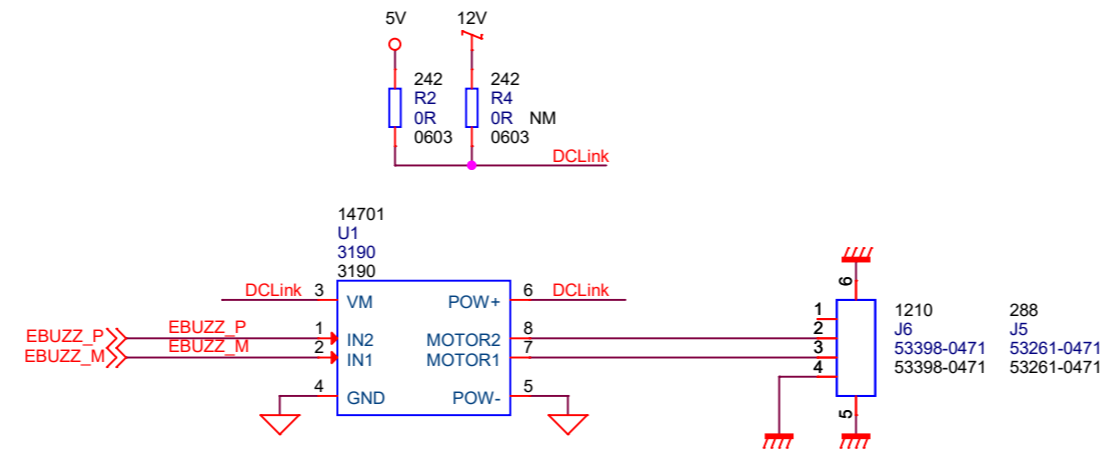




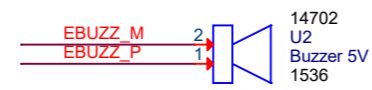
 EDL - Istituto Italiano di Tecnologia Via E.Melen, 83 16152 - Genova	Project: <b>14709 - CTR1S, Controller shield for 32F46DISCO</b>		
	Drawn: C.Lorini	Checked: M.Maggioli	Approved: M.Crepaldi
Document: <b>CTR1S</b>		<b>07: Encoder</b>	
Size: A3	Date: Tuesday, April 21, 2020	Rev. 0	
		Sheet 6 of 10	



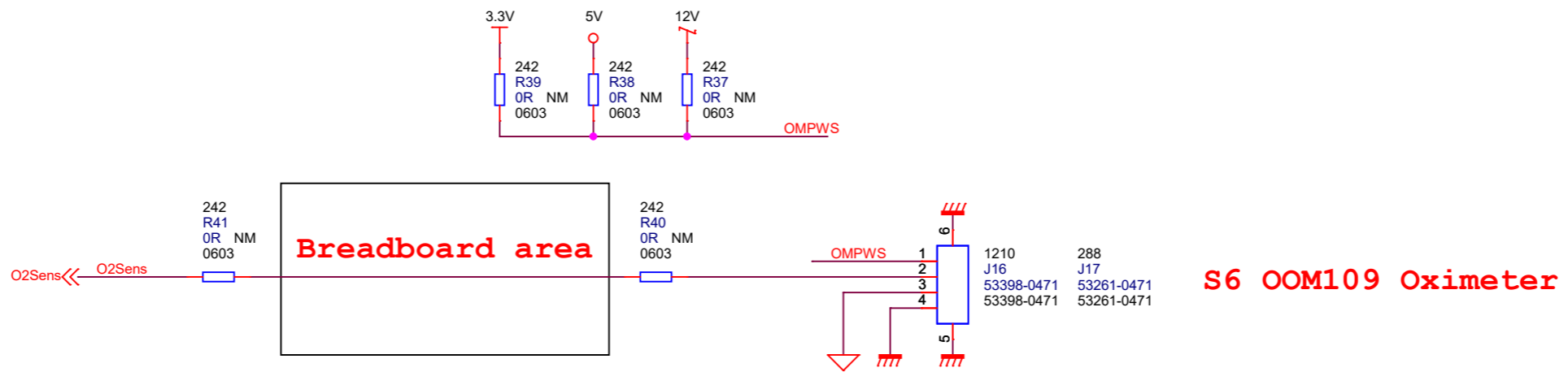
 EDL - Istituto Italiano di Tecnologia Via E.Melen, 83 16152 - Genova	Project: <b>14709 - CTR1S, Controller shield for 32F46DISCO</b>		
	Drawn: C.Lorini	Checked: M.Maggioli	Approved: M.Crepaldi
Document: <b>CTR1S</b>		<b>08: Potentiometers</b>	
Size: A3	Date: Tuesday, April 21, 2020	Rev. 0	
		Sheet 7 of 10	




CPE827 External buzzer



Adafruit 5V no pwm



**S6 OOM109 Oximeter**

	EDL - Istituto Italiano di Tecnologia Via E.Melen, 83 16152 - Genova	Project: <b>14709 - CTR1S, Controller shield for 32F46DISCO</b>		
	Drawn: C.Lorini	Checked: M.Maggioli	Approved: M.Crepaldi	
Document: <b>CTR1S</b>		11:Oximeter		Rev. 0
Size: A3	Date: Tuesday, April 21, 2020	Sheet 9 of 10		



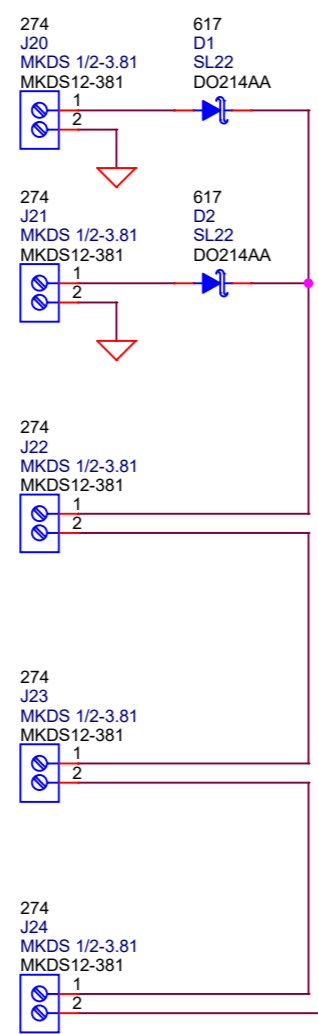
12V in

Battery

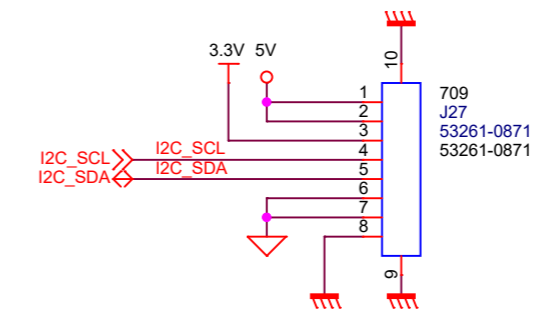
power switch

fuse

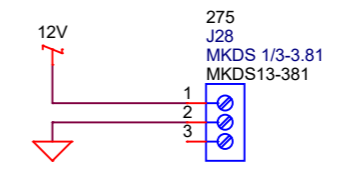
Emgcy switch



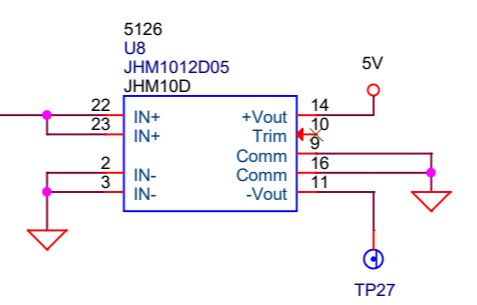
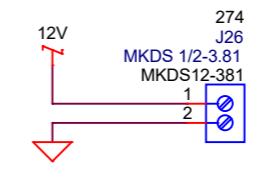
Alimentazione sensori



alimentazione driver valvola onoff



alimentazione driver valvola proporzionale



	EDL - Istituto Italiano di Tecnologia Via E.Melen, 83 16152 - Genova	Project: 14709 - CTR1S, Controller shield for 32F46DISCO		
	Drawn: C.Lorini	Checked: M.Maggioli	Approved: M.Crepaldi	
Document: CTR1S		10: PowerSupply		Rev. 0
Size: A3	Date: Tuesday, April 21, 2020	Sheet 10 of 10		