Ardic

VRAC
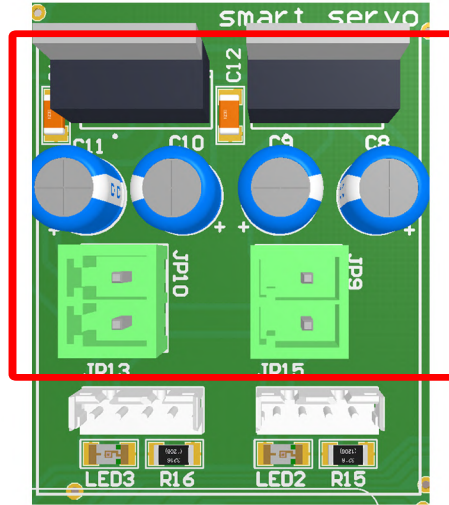
7.4V   GND   TX   RX

! ERROR IN PCB !
YOU MUST MODIFY CABLE
BETWEEN PCB AND
HERKULEX !
7.4V and GND are reversed !

Pin #	Description
1	GND
2	VDD
3	TXD
4	RXD
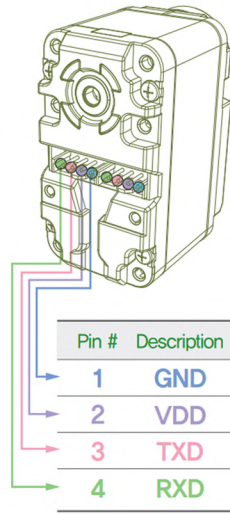
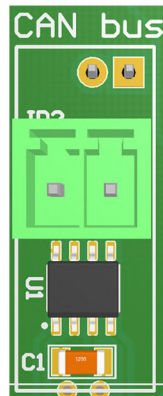smart servo

**SMART SERVO
(HerkuleX)**

**DO NOT MOUNT
REGULATORS**
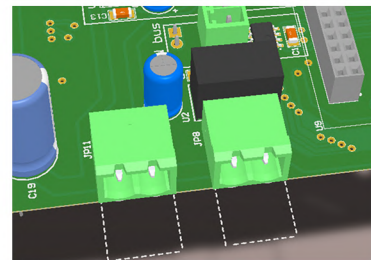
**DO NOT USE
CONNECTORS
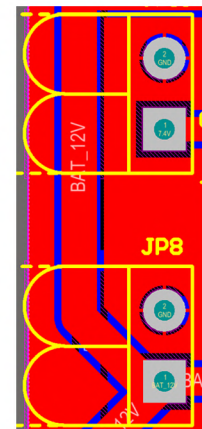JP9 JP10**
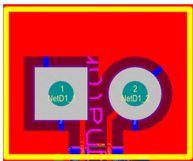
CANH   CANL

CAN bus
termination
resistor

CAN bus

7.4V only used by smart servo

Power supply

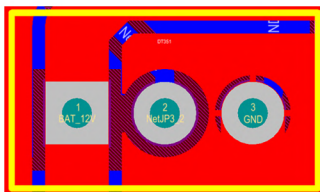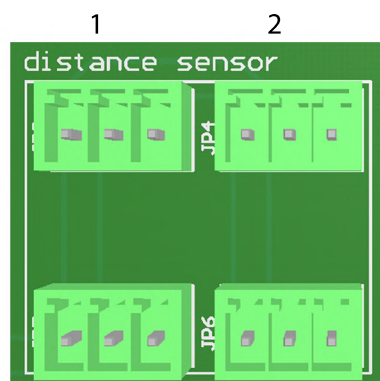GND

7.4V

GND

BAT 12V

BAT12V   distance   GND
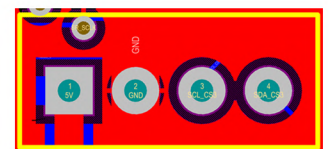
(on DT35)
Brown   White   Blue

distance sensor

**DISTANCE SENSOR
(DT35)**
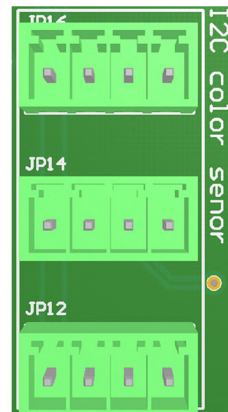
I2C color sensor

5V   GND   SCL   SDA

**I2C COLOR SENSOR
TCS34725**

SV: solenoid valve
VP: vacuum pump
BG: backgripper
FA: front arm

27 VP BG bottom left
26 SV BG bottom left
25 VP BG top left
24 SV BG top left
23 VP BG bottom center
22 SV BG bottm center
21 VP BG top center
20 SV BG top center
19 VP BG bottom right
18 SV BG bottom right
17 VP BG top right
16 SV BG top right
15 VP FA top right
14 SV FA top right
13 VP FA bottom right
12 SV FA bottom right
11 VP FA top left
10 SV FA top left
9 VP FA bottom left
8 SV FA bottom left
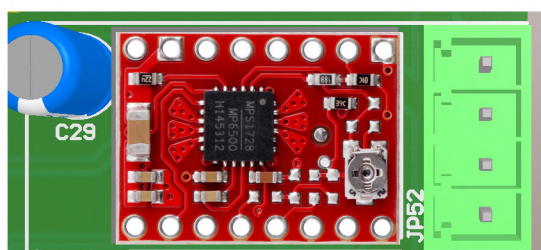
7 BG vertical top rail

6 shovel left

5 BG horizontal bottom left

4 BG horizontal top left

3 BG horizontal top right

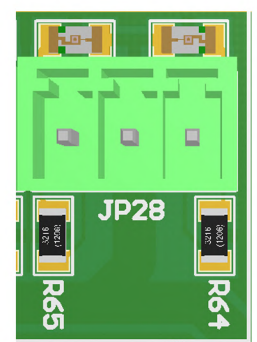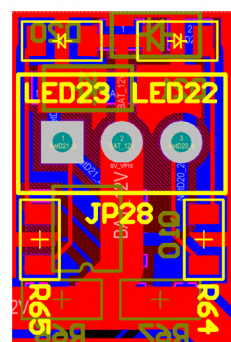2 BG horizontal bottom left

1 shovel right

0 BG vertical bottom rail

STEPPER
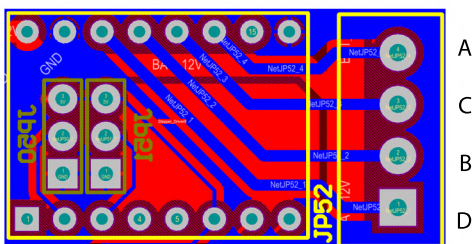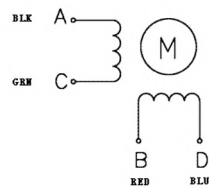
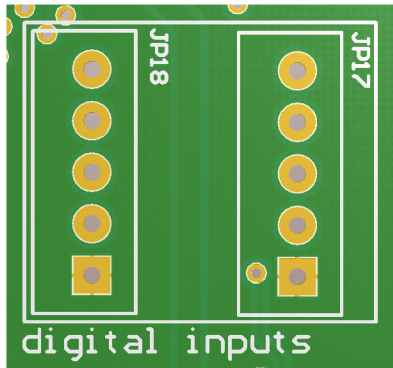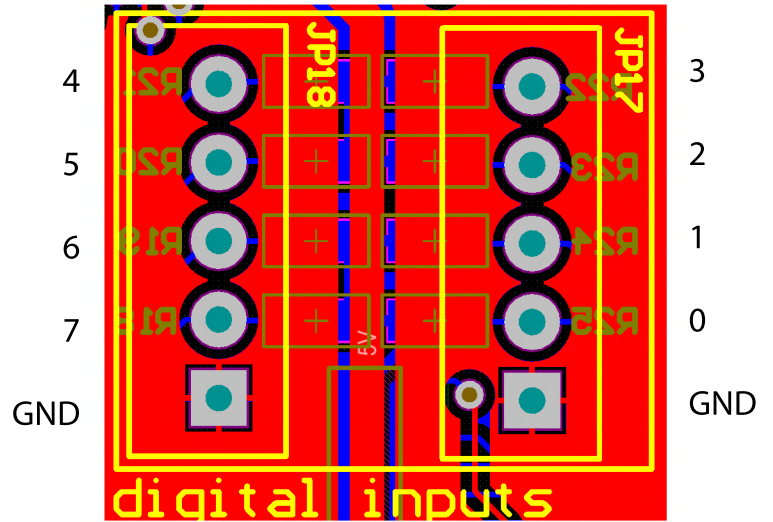VACUUM PUMP
BAT 12V
SOLENOID VALVE

VACUUM PUMP/SOLENOID VALVE

DIGITAL INPUTS
(stepper homing)

JP18		JP17
4		3
5		2
6		1
7		0
GND		GND

digital inputs

ST-LINK

NRST SWDIO GND SWCLK

JP7

SWD (ST-LINK)

JP7

SWD (ST-LINK)
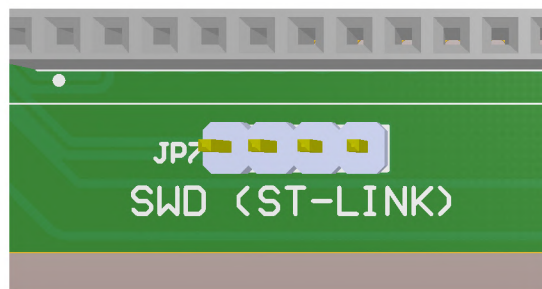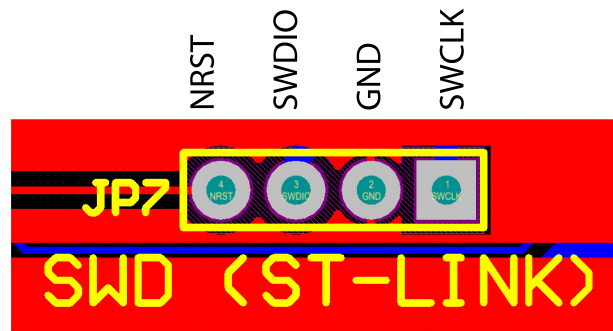
IOBoard v1.2
documentation
revision 1.1

**written by
Jules Dupéroux**

Ardic

VRAC

FRONT

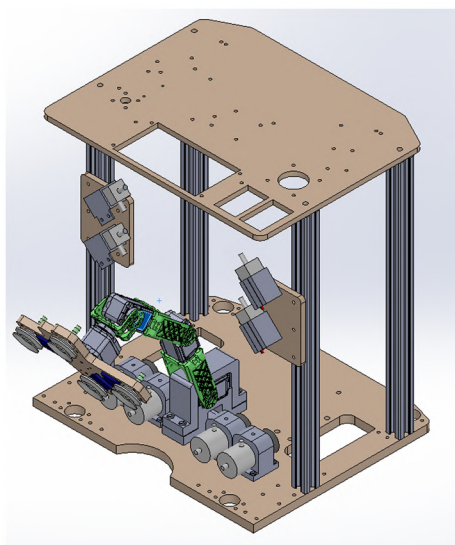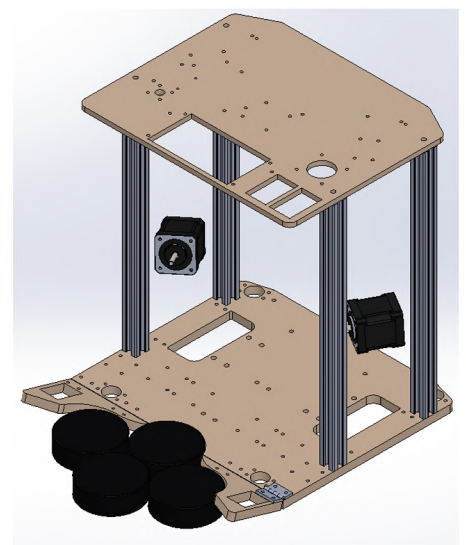FA top right
FA bottom right

FA top left
FA bottom left
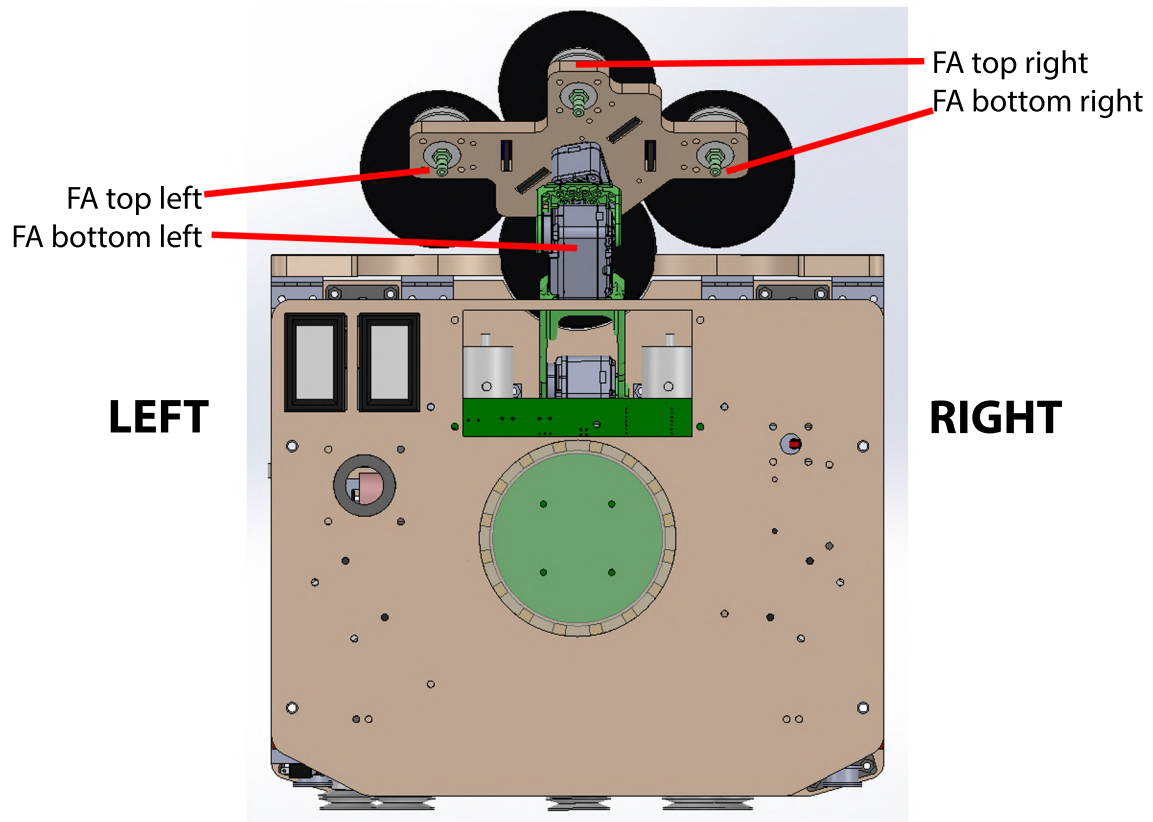
LEFT

RIGHT
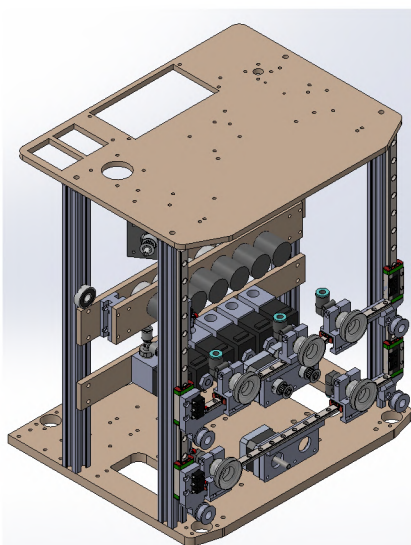
BACK

BACKGRIPPERS

FRONT ARM

SHOVEL