NOTES:

1. EXAMPLE NOTE

REVISION HISTORY:

v1. INITIAL RELEASE

v2. EXAMPLE REVISION WITH ADDITION INFO

FIREWALL

REAR MONOCOQUE

LOOM – REAR

DEVICE – PDM

A

B

C

LOOM – ACCUMULATOR

DEVICE – INVERTER

PHASE.A J1

PHASE.B J2

PHASE.C CASING

DEVICE–MOTOR

PHASE.U RESOLVER

PHASE.V

PHASE.W TEMP

D?

BRAKE LIGHT

1 2

FAN?

REAR RADIATOR FAN

1 2

DEVICE – INERTIA SWITCH

LOOM – FRONT

INERTIA SW

ROLL HOOP

FIREWALL

COCKPIT E–STOP

DASH BOX I/O

LOOM – ROLL HOOP

ROLL HOOP E–STOP LHS

E–STOP RHS

TSAL UNIT

DEVICE – E–STOP – LHS

E–STOP

DEVICE – E–STOP – RHS

E–STOP

DEVICE – TSAL

TSAL I/O

LOOM – PEDAL BOX

PEDAL BOX I/O

PEDAL BOX I/O APPS

BPS – FRONT

BPS – REAR

BOTS

BSPD

DEVICE – APPS

APPS

DEVICE – BPS – FRONT

BPS

DEVICE – BPS – REAR

BPS

DEVICE – BOTS

DEVICE – BSPD

LOOM – DASH BOX

DASH BOX I/O

DASH BOX I/O

DASHBOARD UMBILICAL

DEVICE – E–STOP – COCKPIT

E–STOP

DEVICE – DASHBOARD

ACRONYMS

LOOM – CHARGING CART

Check complete shutdown loop

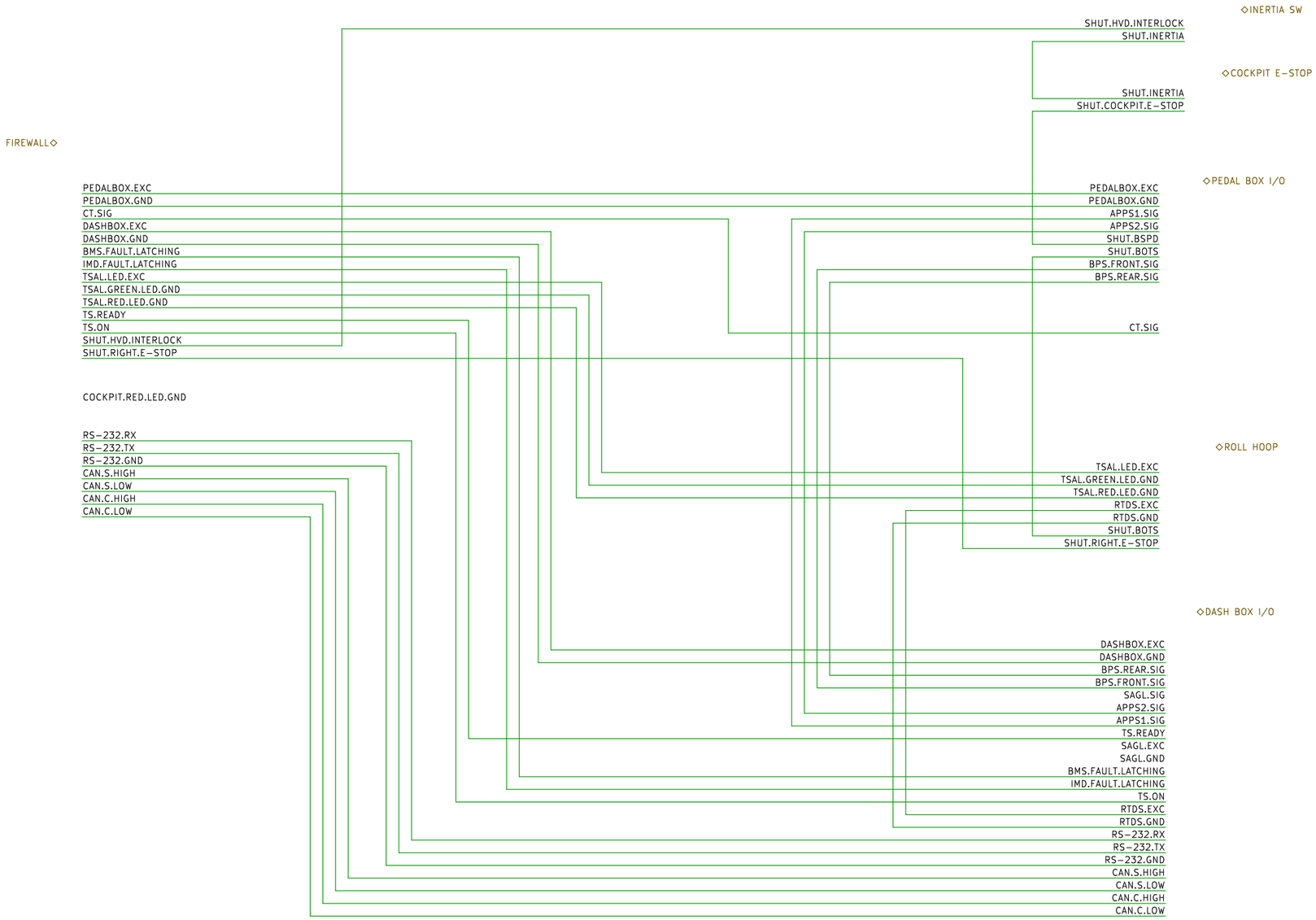
Sheet: /

File: StagX.kicad_sch

Title:

Size: A3 Date: Rev:

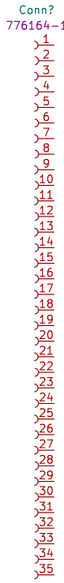
KiCad E.D.A. kicad 7.0.10 Id: 1/23



Sheet: /LOOM - FRONT/
File: loom-front.kicad_sch

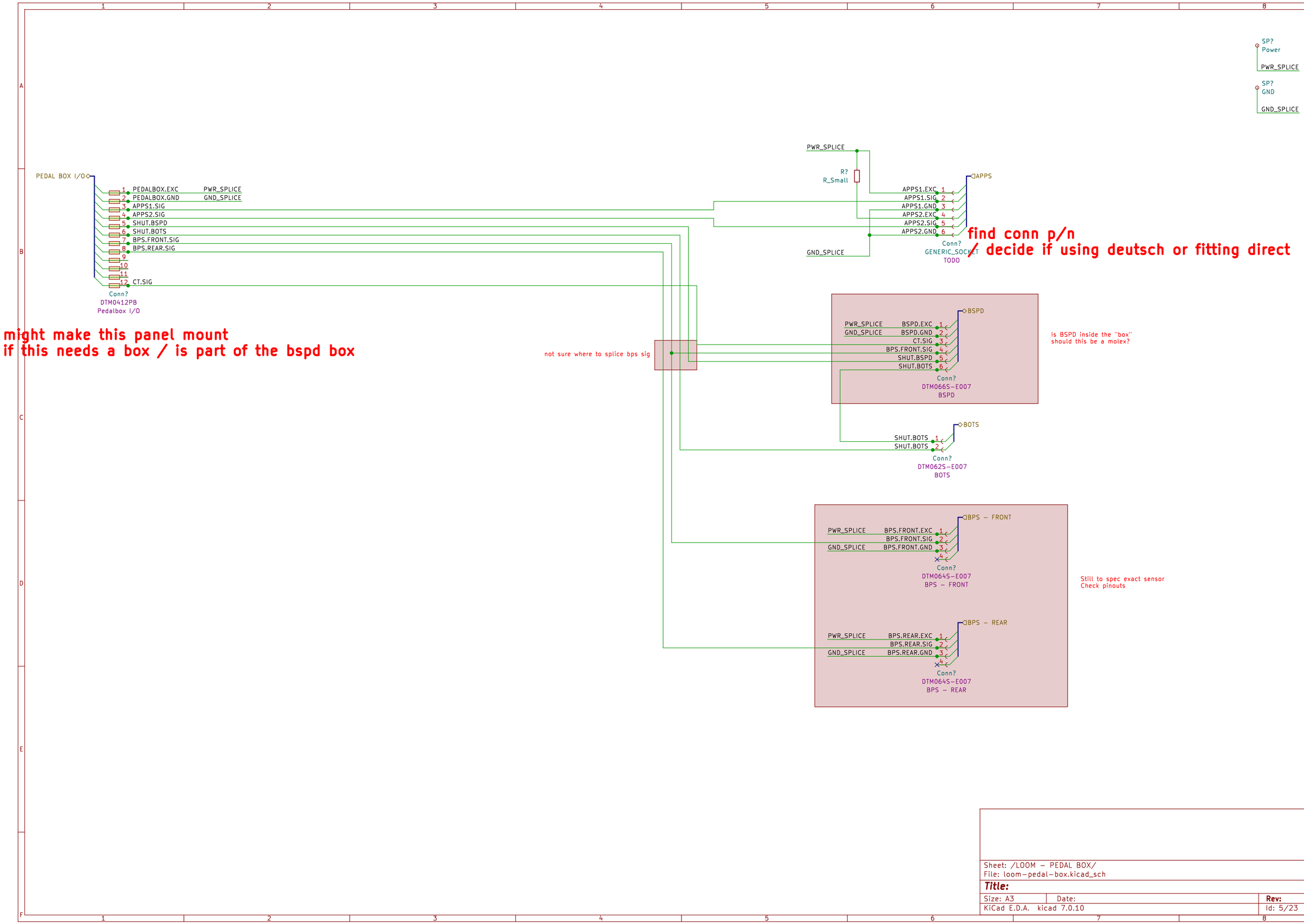
Title:

Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 2/23



Sheet: /LOOM – REAR/	
File: loom–rear.kicad_sch	
Title:	
Size: A3	Date:
KiCad E.D.A. kicad 7.0.10	Id: 3/23

Sheet: /LOOM – ACCUMULATOR/	
File: loom-accumulator.kicad_sch	
Title:	
Size: A3	Date:
KiCad E.D.A. kicad 7.0.10	**Rev:** Id: 4/23



Sheet: /LOOM - PEDAL BOX/
File: loom-pedal-box.kicad_sch

Title:

Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 5/23

Removed extra front bps

Cockpit.Red.LED.GND

DASH BOX I/O◇

DASHBOX.EXC PWR_SPLICE
DASHBOX.GND GND_SPLICE
BPS.REAR.SIG
BPS.FRONT.SIG
SAGL.SIG
APPS2.SIG
APPS1.SIG
TS.READY
SAGL.GND GND_SPLICE
SAGL.EXC PWR_SPLICE
BMS.FAULT.LATCHING
IMD.FAULT.LATCHING
TS.ON
RTDS.EXC
RTDS.GND
RS-232.RX
RS-232.TX
RS-232.GND
CAN.S.HIGH
CAN.S.LOW
CAN.C.HIGH
CAN.C.LOW

VCU

BPS.SIG 1
SAGL.SIG 2
APPS2.SIG 3
APPS1.SIG 4 Conn? Molex_4x2S_Recepticle VCU-IN
TS.READY 5
6
7
8

SHDN_STATE NEEDED?

BMS.FAULT.LATCHING 1 Conn? Molex_2x1S_Recepticle VCU-LATCHING
IMD.FAULT.LATCHING 2

VCU.STATUS 1
VCU.BRAKE.PRESSED 2
TS.ON 3
4 Conn? Molex_4x2S_Recepticle VCU-OUT
VCU.DRS.PWM 5
6
7
8

Other pins?

RTDS.EXC 1
RTDS.GND 2 Conn? Molex_2x2S_Recepticle VCU-RTDS
3
4

CAN.S.HIGH 1
CAN.S.LOW 2 Conn? Molex_2x2S_Recepticle VCU-CAN
CAN.C.HIGH 3
CAN.C.LOW 4

1 VCU.EXC PWR_SPLICE
Conn? 2 VCU.GND GND_SPLICE
Molex_2x2S_Recepticle 3 VCU.EXC PWR_SPLICE
VCU-PWR 4 VCU.GND GND_SPLICE

1
2 R2D.BUTTON.GND
3 DRS.BUTTON.GND
4 TS.ON.BUTTON.GND
Conn? 5 LVS.LED.GND
Molex_5x2S_Recepticle 6 DRS.LED.GND
VCU-DASH-CONTROL 7 TS.ON.LED.GND
8 R2D.LED.GND
9 BMS.LED.GND
10 IMD.LED.GND

Why no LVS?

1 R2D.BUTTON.EXC
2 TS.ON.BUTTON.EXC
Conn? 3 TS.ON.LED.EXC
Molex_3x2S_Recepticle 4 R2D.LED.EXC
VCU-DASH-PWR 5 BMS.LED.EXC
6 IMD.LED.EXC

◇DASHBOARD

R2D.BUTTON.GND 1
TS.ON.BUTTON.GND 2
TS.ON.LED.GND 3
R2D.LED.GND 4
BMS.LED.GND 5
IMD.LED.GND 6
R2D.BUTTON.EXC 7
TS.ON.BUTTON.EXC 8
TS.ON.LED.EXC 9
R2D.LED.EXC 10
BMS.LED.EXC 11
IMD.LED.EXC 12

Conn?
Deutsch_DTM_12S_Pin
DTM0612SB
Dashboard

SP?
Power
PWR_SPLICE

SP?
GND
GND_SPLICE

UMBILICAL◇

Umbilical

RS-232.RX
RS-232.TX
RS-232.GND
L120.ETX-
L120.ETX+
L120.ERX-
L120.ERX+

not sure where to splice can

L120.ETX- 1
L120.ETX+ 2
BPS.REAR.SIG 3
4
5
6
7
8
9
L120.ERX- 10
L120.ERX+ 11
12
13
14
15
16
17 Conn?
CAN.S.LOW 18 Superseal 65044
CAN.S.HIGH 19 L120
20
21
22
23
24
25
CAN.C.LOW 26
CAN.C.HIGH 27
28
29
30
31
32
PWR_SPLICE L120.EXC 33
GND_SPLICE L120.GND 34

L120 box here

sensors that may need to connect to this:
- wheel speed sensors
- dampner pots

Sheet: /LOOM - DASH BOX/		
File: loom-dash-box.kicad_sch		
Title:		
Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 6/23

Need to work out what this will be in reality.
Will the PCB do some splicing for us?
Will the LEDs be soldered to PCB somehow?
Or is the PCB just a mounting board and nothing electrical?

Sheet: /DEVICE – DASHBOARD/
File: device-dashboard.kicad_sch

Title:

Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 7/23

ROLL HOOP◇

◇TSAL UNIT

TSAL.LED.EXC — TSAL.LED.EXC
TSAL.GREEN.LED.GND — TSAL.GREEN.LED.GND
TSAL.RED.LED.GND — TSAL.RED.LED.GND
RTDS.EXC — RTDS.EXC
RTDS.GND — RTDS.GND
SHUT.BOTS — SHUT.BOTS
SHUT.RIGHT.E-STOP — SHUT.LEFT-E-STOP

◇E-STOP LHS

SHUT.LEFT-E-STOP

◇E-STOP RHS

SHUT.LEFT-E-STOP
SHUT.RIGHT-E-STOP

Sheet: /LOOM - ROLL HOOP/
File: loom-roll-hoop.kicad_sch

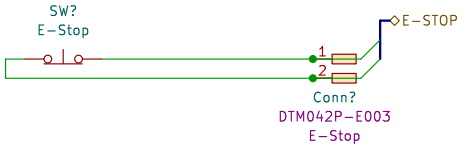
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 7/23

Sheet: /LOOM – CHARGING CART/
File: loom–charging–cart.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 7/23

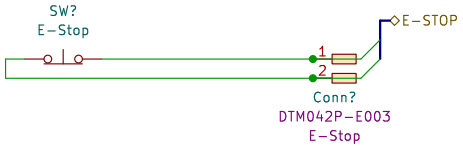


Sheet: /DEVICE - E-STOP - LHS/ File: device-e-stop.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 8/23

Sheet: /DEVICE – INERTIA SWITCH/
File: device-inertia-switch.kicad_sch

Title:

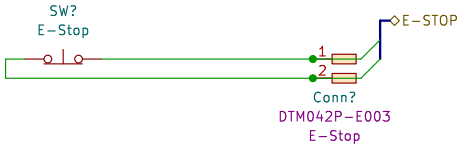
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 9/23



Sheet: /DEVICE - E-STOP - COCKPIT/
File: device-e-stop.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 10/23

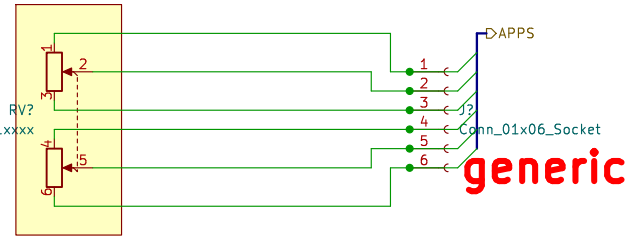


Sheet: /DEVICE - E-STOP - RHS/
File: device-e-stop.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 11/23

Find P/n
Maybe update to new graphic



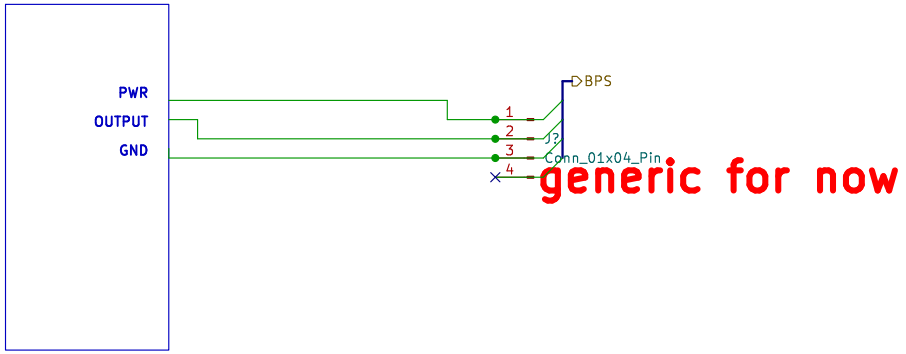
generic for now

Sheet: /DEVICE – APPS/
File: device–apps.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 12/23

Add device symbol here



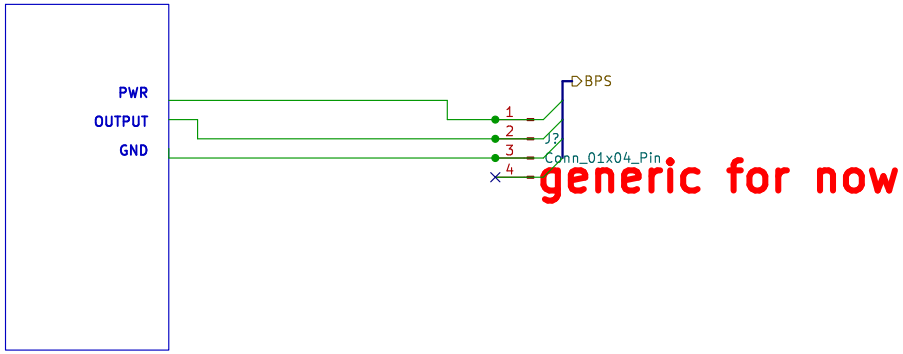
generic for now

Sheet: /DEVICE – BPS – FRONT/
File: device–bps.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 13/23

Add device symbol here



generic for now

Sheet: /DEVICE – BPS – REAR/
File: device–bps.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 15/23

Sheet: /DEVICE – BSPD/
File: device–bspd.kicad_sch

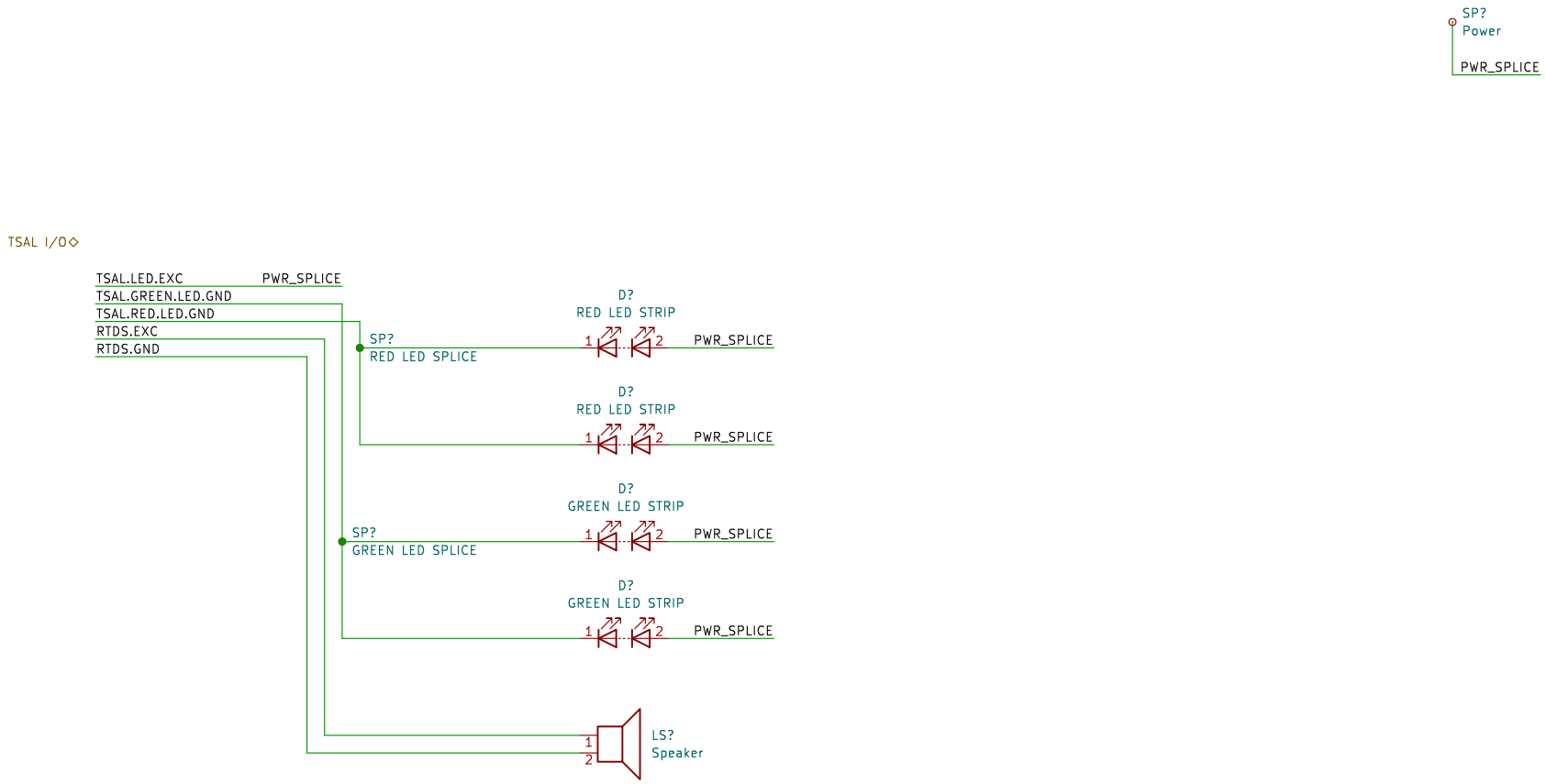
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 16/23

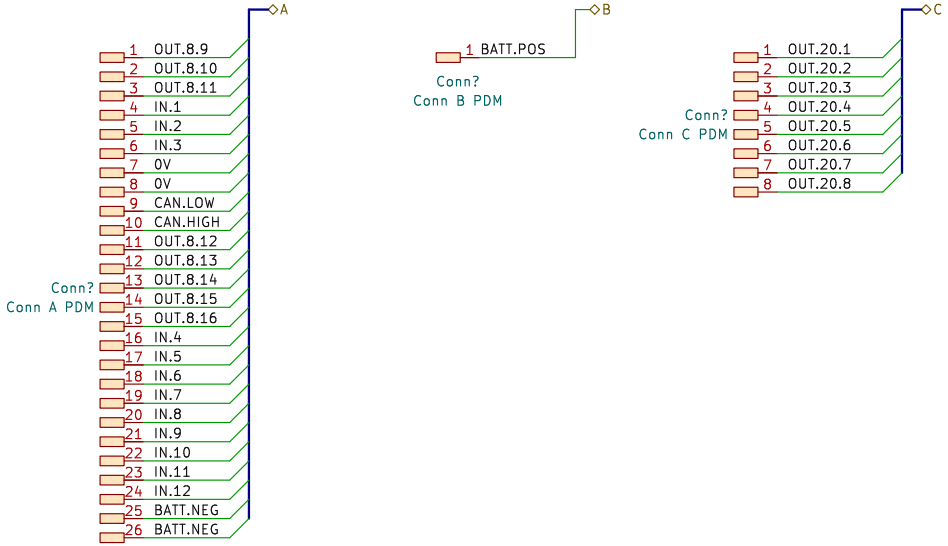
Sheet: /DEVICE – BOTS/
File: device–bots.kicad_sch

Title:

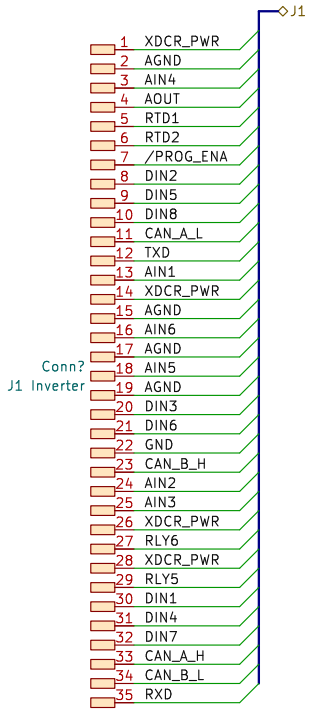
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 17/23

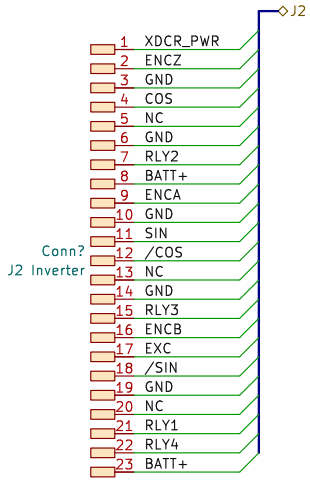


Sheet: /DEVICE – TSAL/		
File: device–tsal.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 19/23

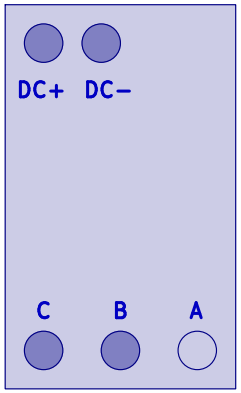


Sheet: /DEVICE – PDM/		
File: device–pdm.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 22/23





PHASE CONNECTIONS



gen 2 or gen 3?
I've assumed gen 3 for now

ADD CONNECTION HERE

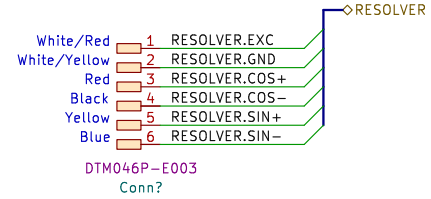
CASING

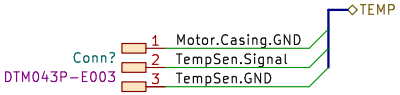
Sheet: /DEVICE – INVERTER/
File: device–inverter.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 23/23

PHASE CONNECTIONS





MOTOR CASING TO GROUND DIRECTLY TO INVERTER CASING THROUGH FLYING RING TERMINAL FROM BACK OF THIS CONNECTOR

RESOLVER SHIELD GROUNDED VIA MOTOR CASING

Sheet: /DEVICE-MOTOR/		
File: device-motor.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 24/23

APPS Accelerator Pedal Position Sensor

BPS Brake Pressure Sensor

Sheet: /ACRONYMS/		
File: acronyms.kicad_sch		
Title:		
Size: A3	Date:	**Rev:**
KiCad E.D.A. kicad 7.0.10		Id: 99/23