EV3 Enclosures Overview

Overview of enclosure modules, notable features and connections for EV3. Refer to individual documentation for more detailed description of enclosures.

# Accumulator

## PCBs/Units

* Orion BMS
* IMD
* DCDC converter
* Precharge
* Cooling fan controller
* PDB
* isoSPI to CAN
* 8x notmons

## Features

* 2x AIRS
* 2x charge isolator relays
* 3x cooling fans

## Connections

* LV REN
* HV REN
* Charge

# Pedalbox

## PCBs

* BSPD main
* CAN node minor

## Features

* BOTS
* 2x Brake pressure sensors
* 2x TPS sensors

## Connections

* Dash
* External sensors

# Front Electronics Node (Dashboard)

## PCBs

* CAN node main
* PDB

## Features

* 5x LEDs
* 1x E-stop
* 1x 7-seg unit
* 1x RTD button
* 1x Inertia switch

## Connections

* Pedalbox
* Sensor hub FR
* Sensor hub FL
* Steering wheel
* REN

# Centre Electronics Node (HVD)

## PCBs

* HFL
* CAN node main
* PDB
* TS Interface
* Power control

## Features

* 3x banana sockets (TSMPs)
* 1x HVD
* 2x Master switches
* 1x HFR

## Connections

* REN
* Accumulator
* Controllers
* 2x Controller HV
* Accumulator HV
* Energy meter voltage

# Rear Electronics Node (Brake Light)

## PCBs

* CAN node main
* Cooling controller

## Features

* Brake light

## Connections

* FEN
* CEN
* UEN
* Cool left
* Cool left
* Sensor hub RL
* Sensor hub RR
* Shore
* MoTeC
* Energy meter power

# Upper Electronics Node (Toblerone)

## PCBs

Null

## Features

* 2x E-stop
* 2x TSAL lights

# Sensor Hubs

## PCBs

* CAN node minor

## Features

Null