v4 Power + EPO Board

Main battery | +ve / -ve

Aux battery 12V, 6Ah | +ve / -ve

Board outline

Power with Comms

Power brick 24V 16Amps

CS_NonUPS

Current sensing through this path

24V_Brick

Connector for Non UPS Loads with CAN Comms

Power with CAN Comms

Non UPS loads

Load switch board with the control, current sensing and CAN Comms for each port

- Lidar
- Beacon and top lights
- Indicators
- Lite steering
- Auto unhitch

Buck Boost

CS_UPS

Current sensing through this path

Connector for UPS Loads with CAN Comms

Power with CAN Comms

UPS loads

Load switch board with the control, current sensing and CAN Comms for each port

- v4 control
- v4 brake
- v4 compute

Aux battery Charging Circuit

24V_Brick

CS_NonUPS

CS_UPS

Aux battery Comms

MCU STM32

Headers for SPI, UART and I2C

CAN Port

USB Port

Connector for EPO buttons

To the other boards

Inrush Current protection Circuit

EPO buttons

Power ON button

Coil
A1 | A2
Contactor 1 for Board level electronics

Coil
A1 | A2
Contactor 2 for Motor Controller and Motor loads