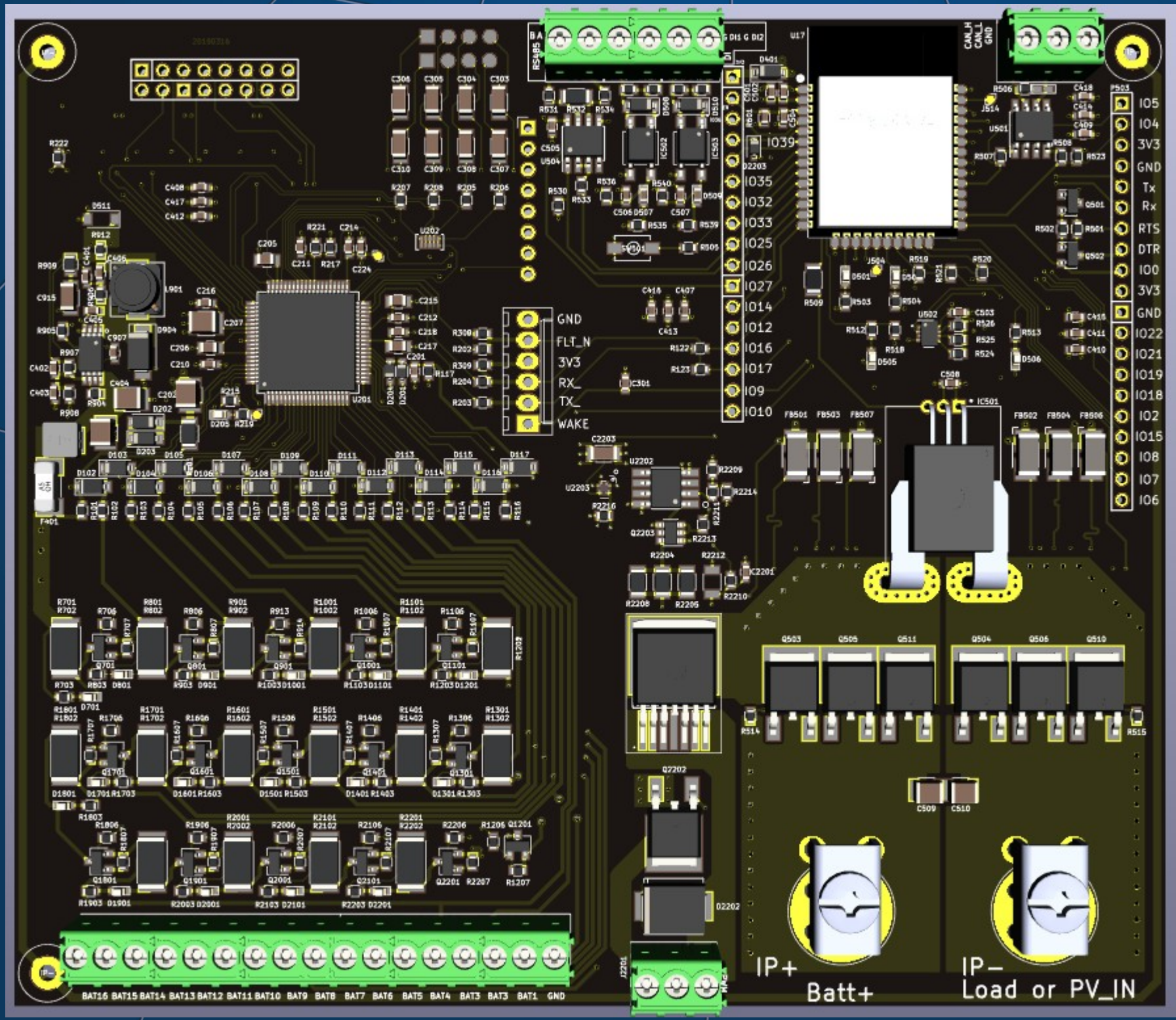
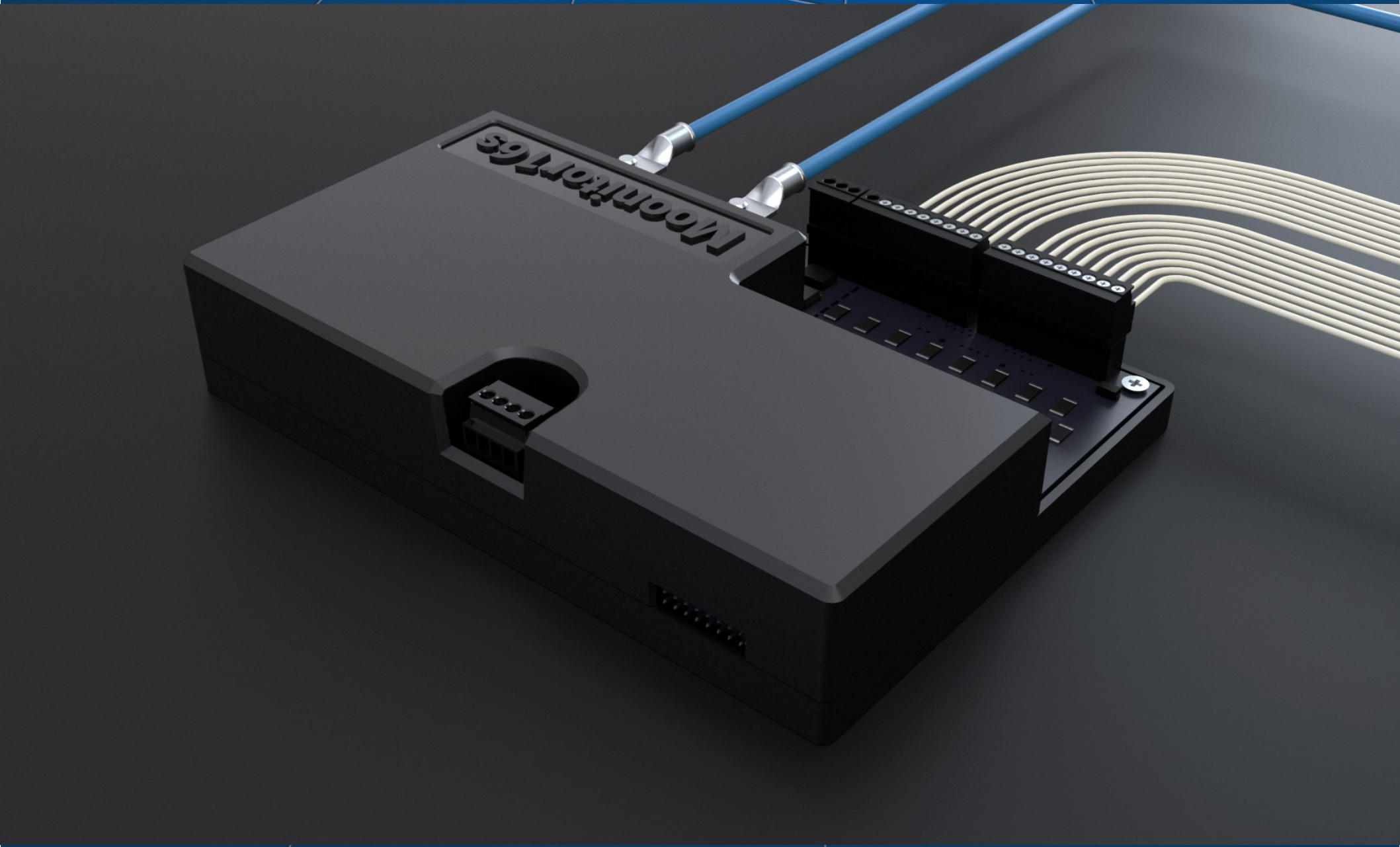
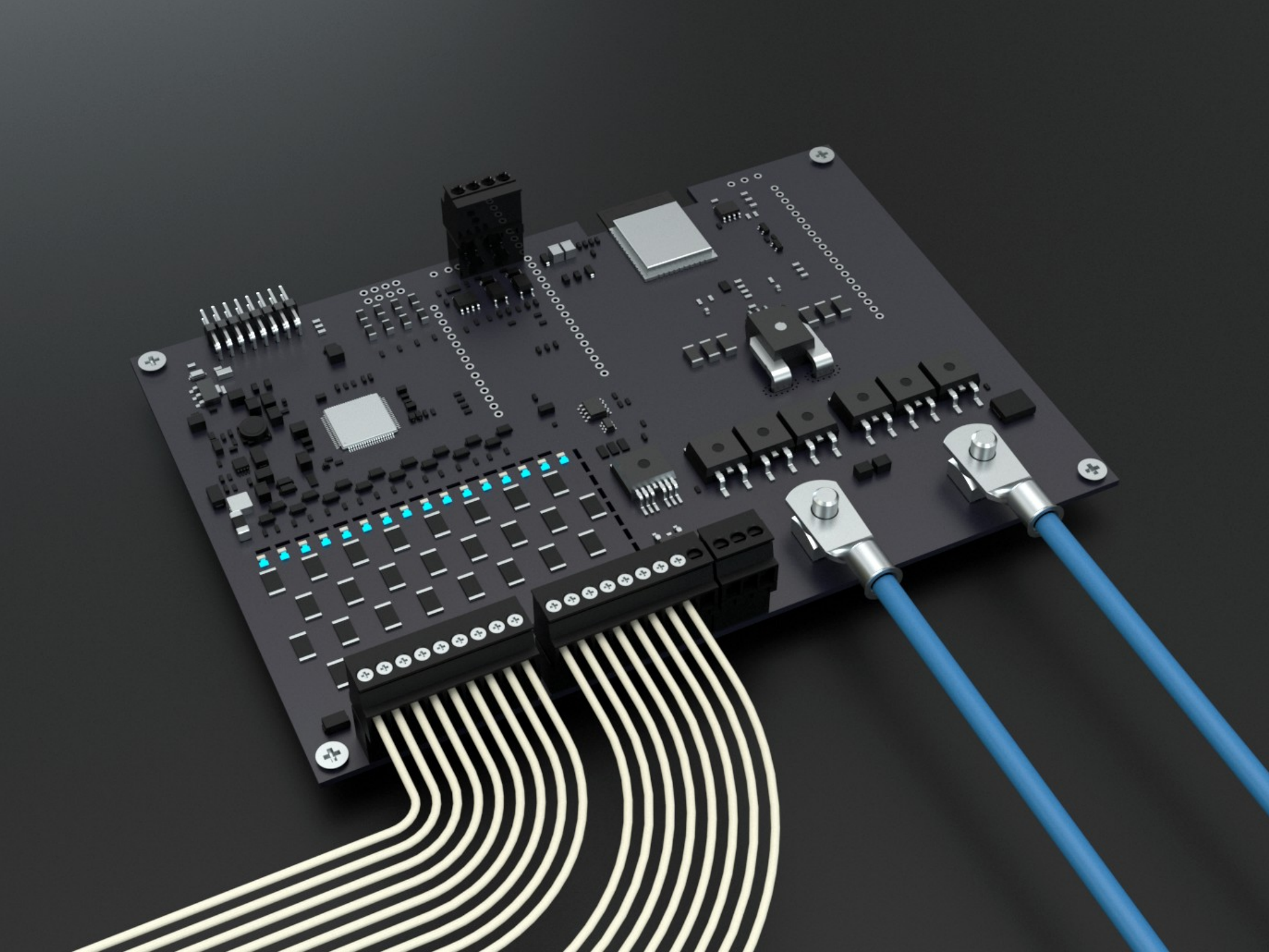

MOONITOR 16S
Securing the Energy Transformation


RS485
CAN_H
CAN_L
GND
IO5
IO4
3V3
GND
Tx
Rx
RTS
DTR
IO0
3V3
GND
IO22
IO21
IO19
IO18
IO2
IO15
IO8
IO7
IO6
GND
FLT_N
3V3
RX_
TX_
WAKE
IP+
Batt+
IP−
Load or PV_IN
BAT16 BAT15 BAT14 BAT13 BAT12 BAT11 BAT10 BAT9 BAT8 BAT7 BAT6 BAT5 BAT4 BAT3 BAT3 BAT1 GND


SOLUTIONS

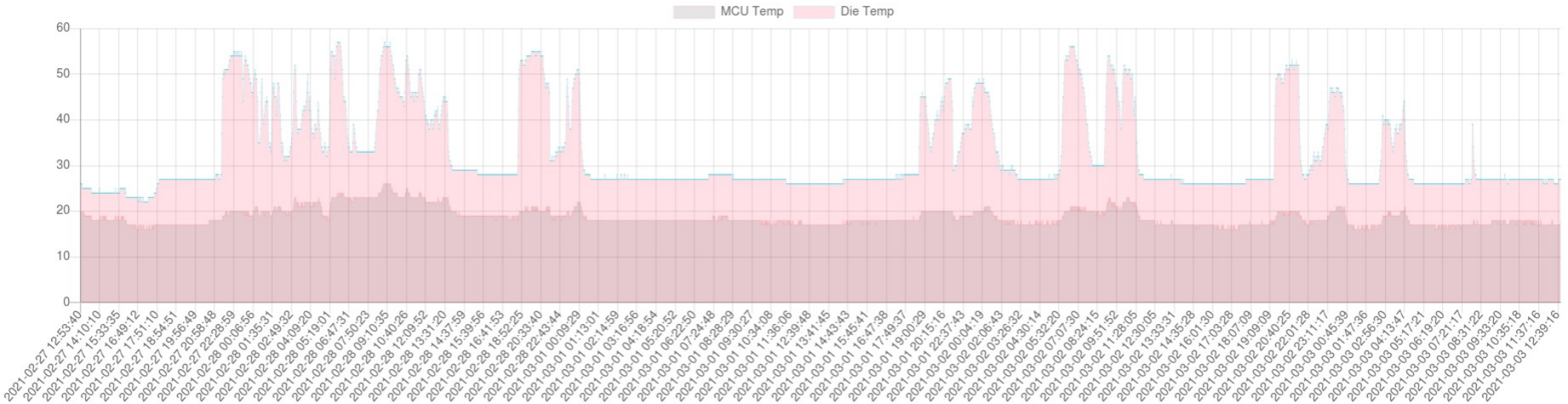


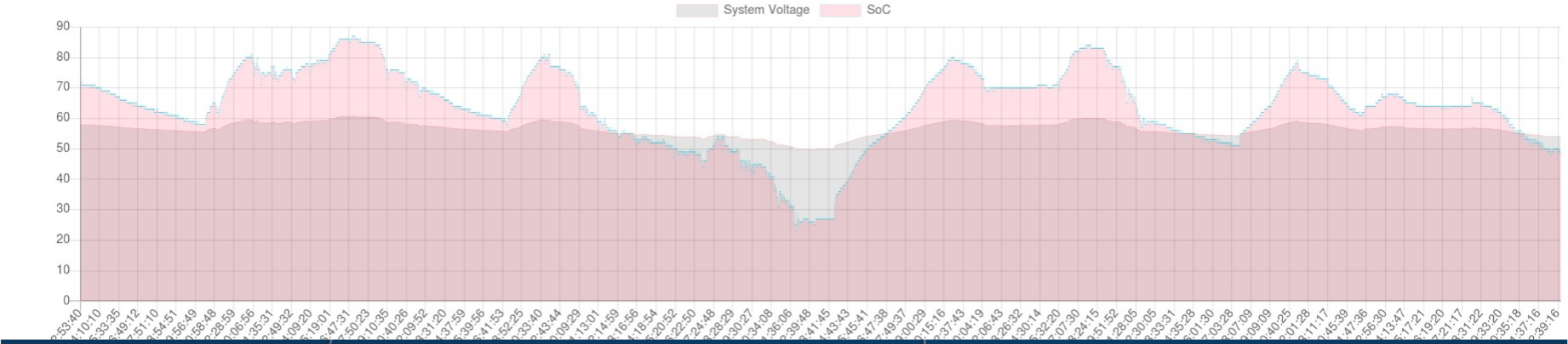

Moonitor16s

Advanced Search

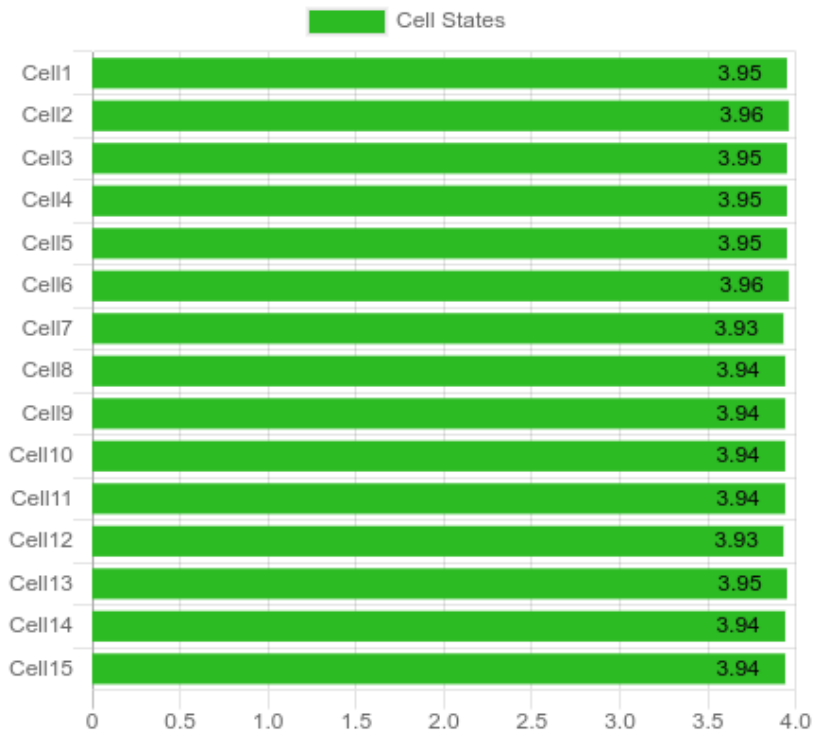
Show

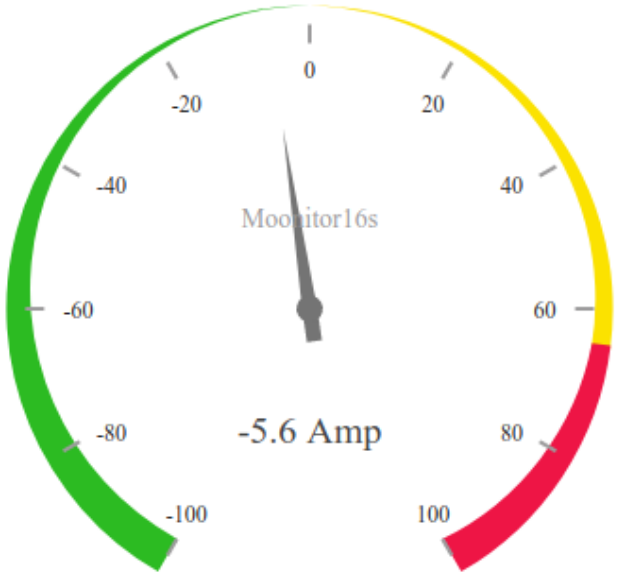
an Hour | 1 Day | 3 Days | 1 Week | 1 Month | 3 Months | 6 Months | 1 Year





Moonitor16S





Inputs

Digital Input 1	OFF
Digital Input 2	OFF

Outputs

DO 1	ON
DO 2	OFF

Mosfet

Mosfet CHG	ON
Mosfet DSC	OFF

Moonitor16S

Status	
Current State	-5.1
Last Event	Restarted
State of Charge	93
Pack Voltage	58.94 V
Max cell Voltage	3.94 V
Min cell Voltage	3.91 V

Input	Type	Value	Max
Die Temp		37°C	
MCU Temp		27°C	
Aux_1		14°C	
Aux_2		14°C	
Aux_3		13°C	
Aux_4		14°C	
Aux_5		14°C	

Inputs

Digital Input 1	OFF
Digital Input 2	OFF

Outputs

DO 1	ON
DO 2	OFF

Mosfet

Mosfet CHG	ON
Mosfet DSC	OFF

Brief Description

- Monitors and Balances 6-to-16 Lithium chemistry Cells
- Automotive grade hardware design
- 16 bit high performance 30 channel ADC
- Redundancy on hardware functions
- Redundant MCU design
- 10 temperature readings
- Engineered for high system Robustness
- Designed for Functional Safety Standard Requirements

Possible Applications

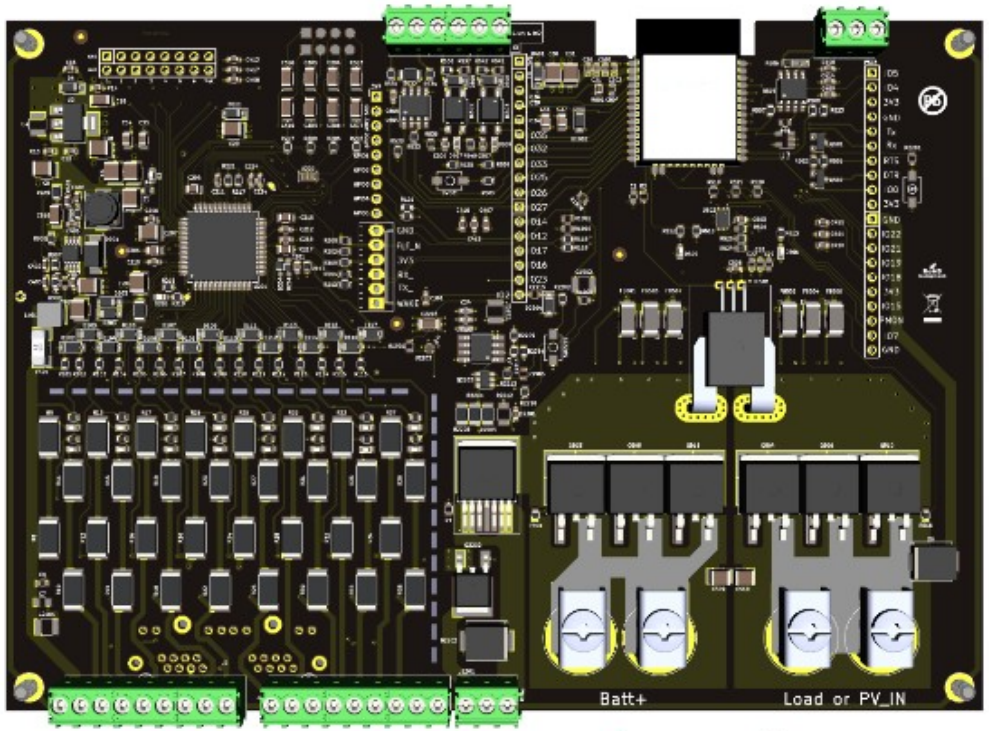
- Electric and Hybrid Electric Vehicles (EV)
- Single board up to 80V Energy Storage (EES) Systems
- High-Reliability Automotive applications
- Power-Wall
- Solar/wind powered storage systems
- Small scale electrical cars/motors/scooters
- Backup power storages
- Grid tied systems

Protections

- Over Voltage
- Under Voltage,
- Over Temperature,
- Under Temperature,
- Open Wire detection,
- Communication faults,
- Ground lose protection, (Space grade)
- Emergency contractor protection (Automotive grade)

Hardware specs

- 2 Automotive grade Digital input
- 2 Automotive grade Digital output
- High current e-fuse (Solid state)
- Thermal Shutdown
- Emergency Shot down
- Under 1 watt continuous power consumption



2 Series 3 parallel 300Watt solar system
each panel has 39V open circuit voltage



Positive

GND

14S system,
Batt14,15,16
are shorted

Emergency Cut

Inverter



GND Switching for
Emergency cut

100amp Max

1amp Max

1amp Max

Moonitor16S Battery Monitor Cell States Settings

Wifi	
SSID	FASTWEB-A1U6J4
Password	V3S714B94O
Voltage	
Under Voltage Alarm	3.1
Under Voltage Cut	2.99
Over Voltage Alarm	3.95
Over Voltage Cut	3.97
Balance Voltage	3.94
Current Limits	
Charging	40
Discharging	65
Temperature Cutoffs	
MCU Temperature Cut off	90
AUX Temperature Cut off	30
Cells	
Cell Count	14
Balance Cell Count	5
Aux	
Aux Count	5

Soft Restart Save

Log Type	Value
Local IP	192.168.1.129
Alarms	6
Loop Counter	8406
Free Heap	166848
Hardware version	V2
Software version	V5.0



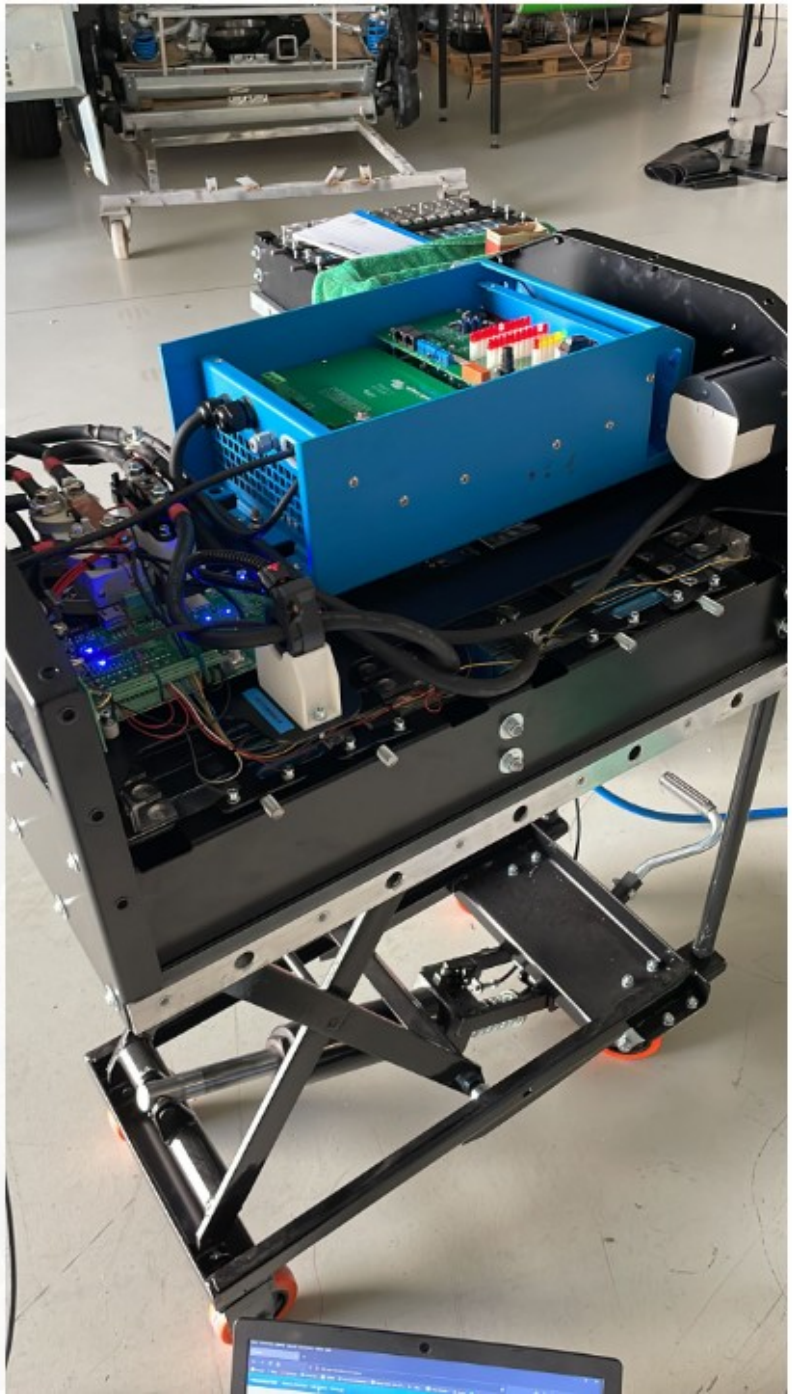



DB
Autokraft
25

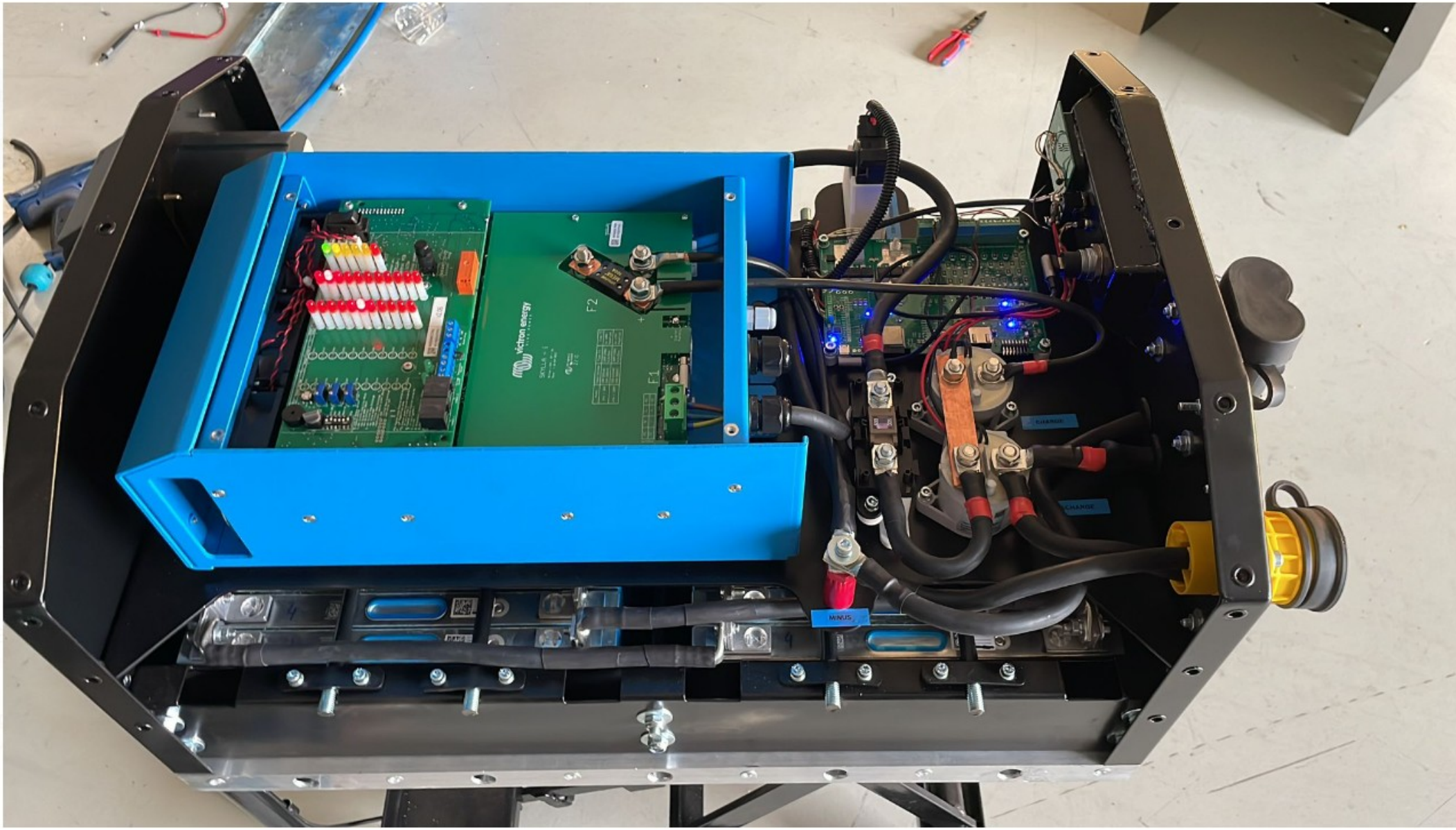






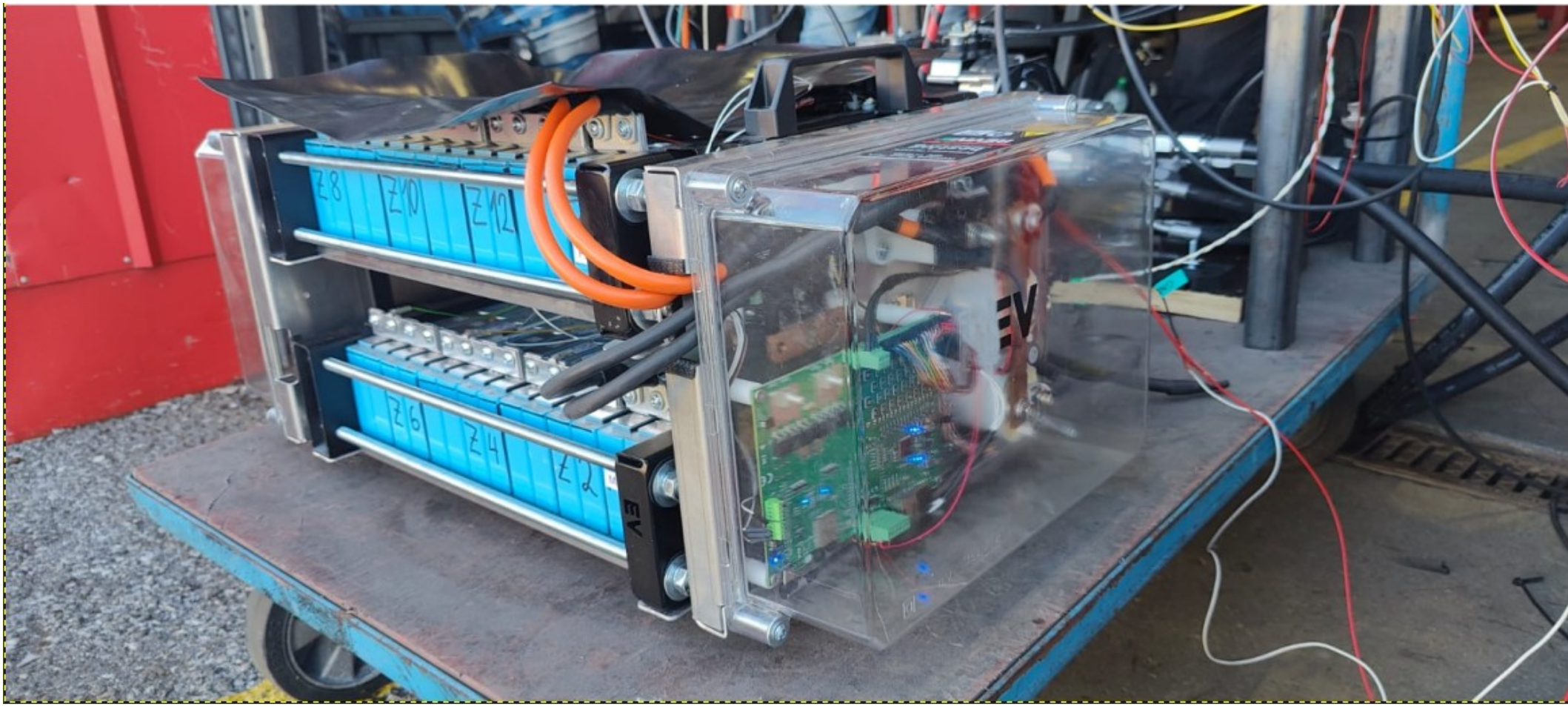





victron energy
F1
F2
MINUS



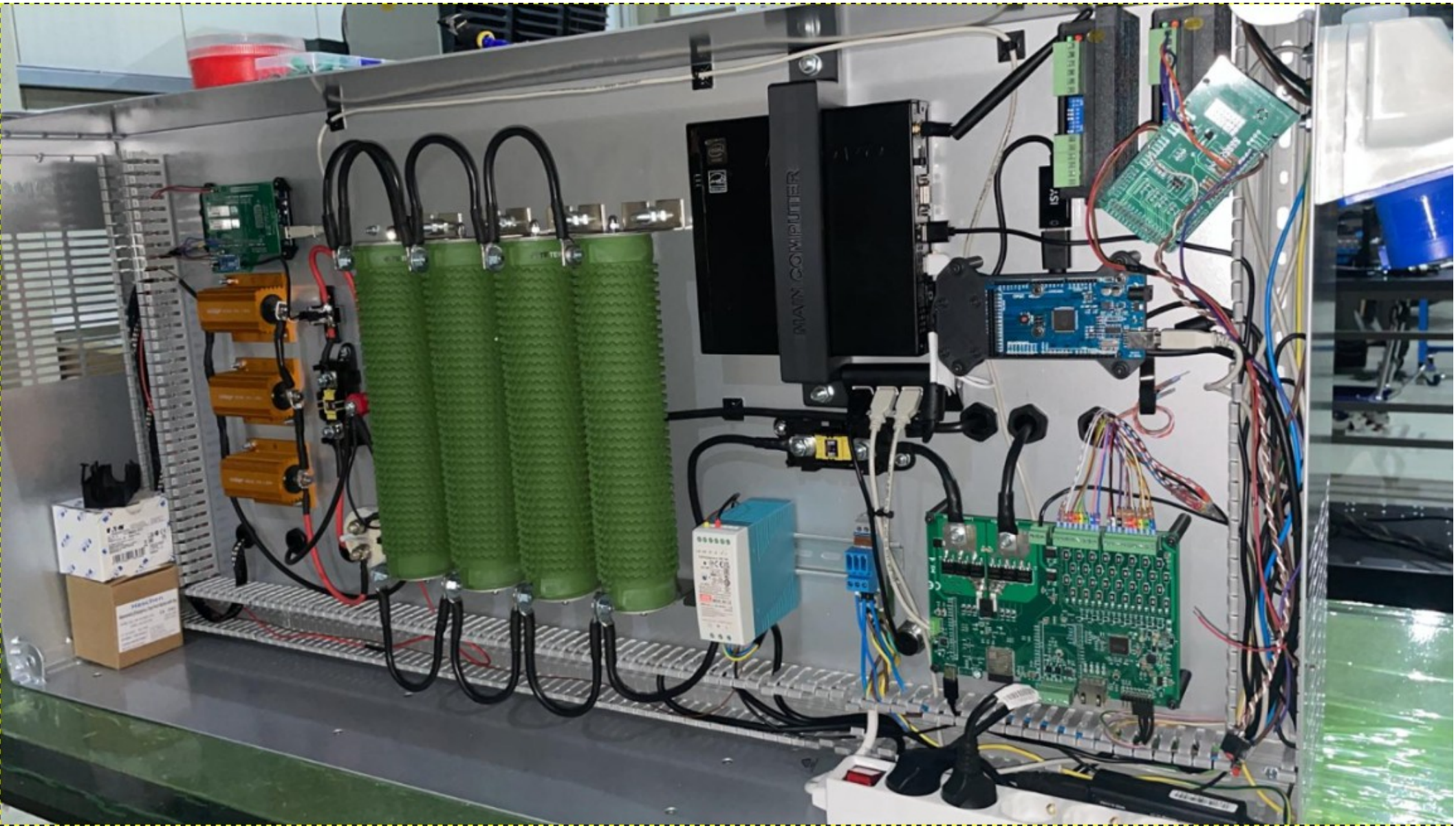



Z8
Z10
Z12
Z6
Z4
Z2
EV








MAIN COMPUTER

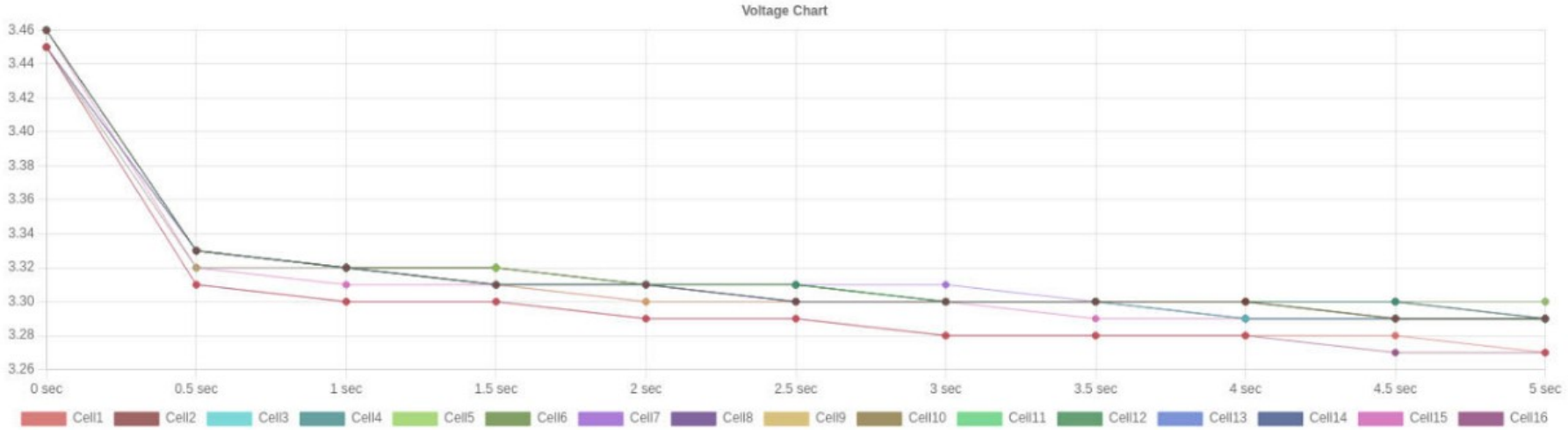

ViewSonic



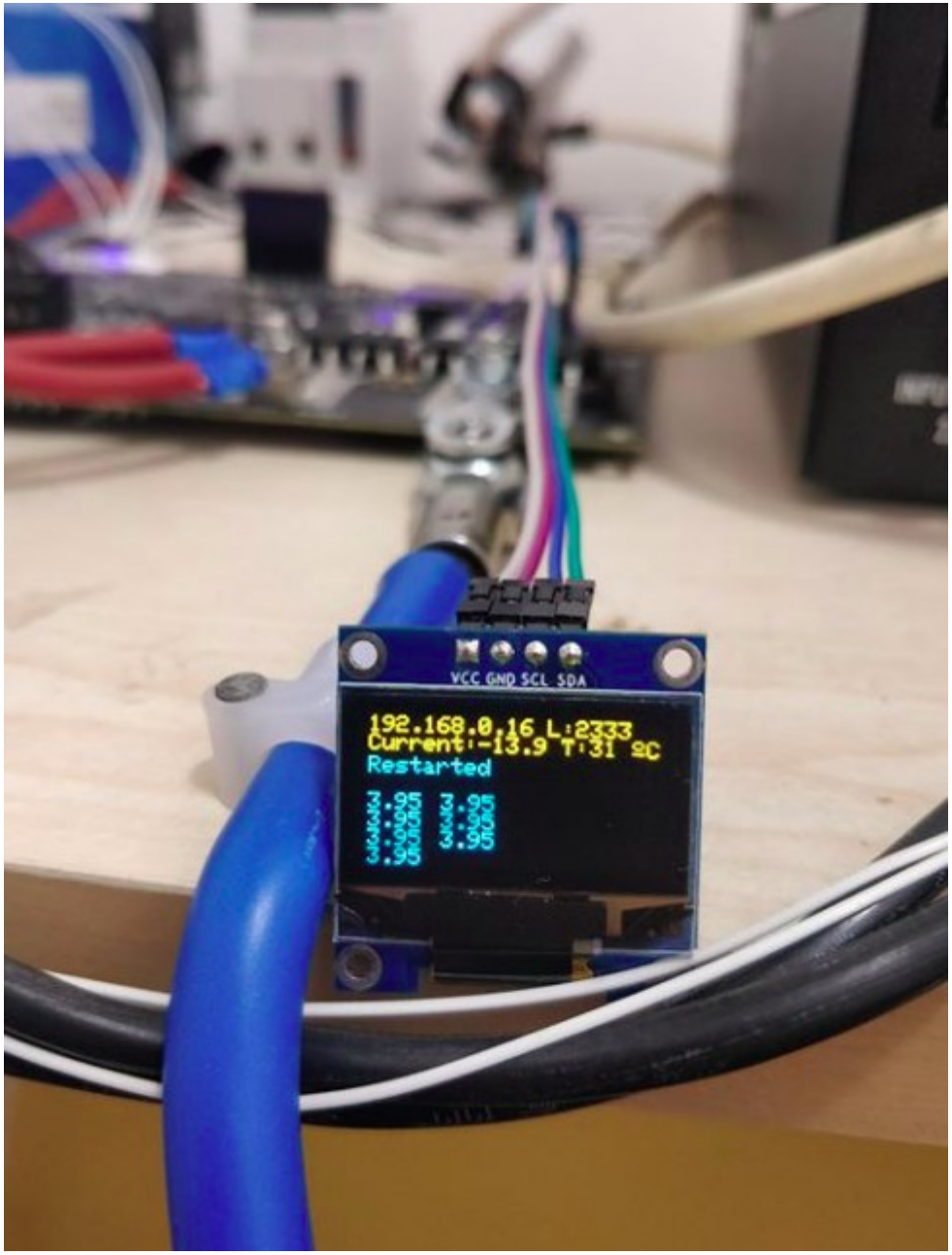


Test Detail

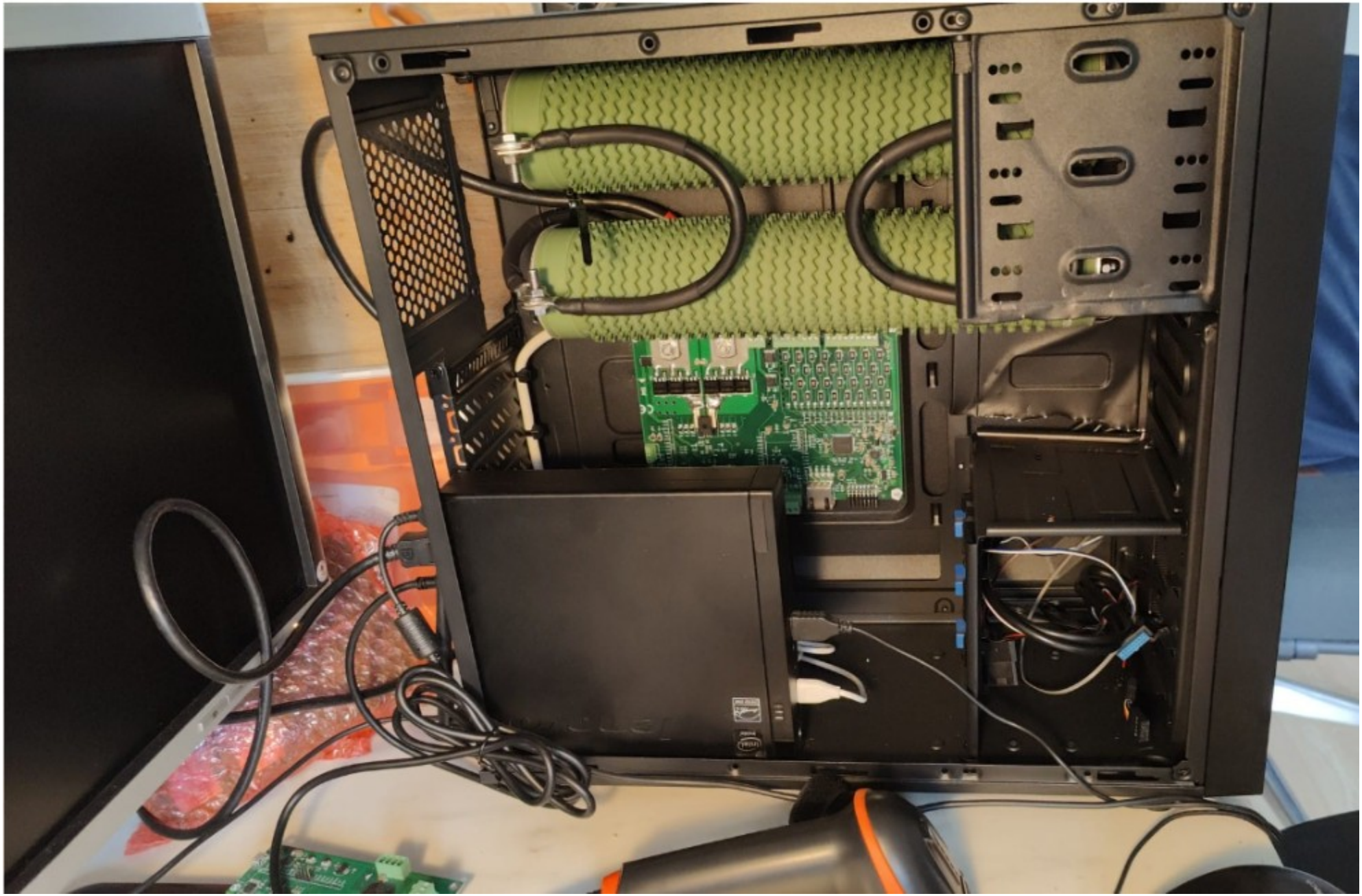
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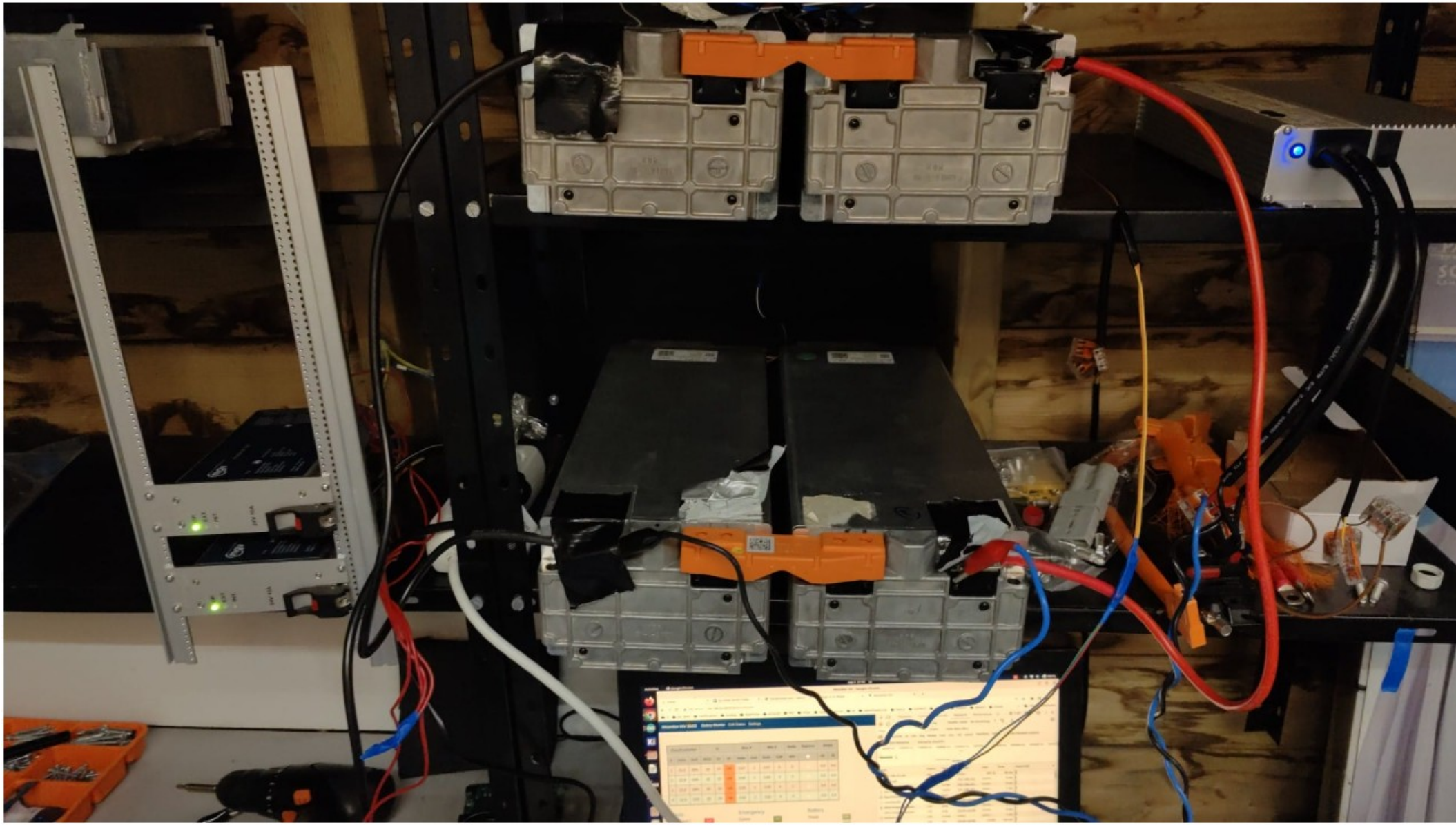


Field	Cell1	Cell2	Cell3	Cell4	Cell5	Cell6	Cell7	Cell8	Cell9	Cell10	Cell11	Cell12	Cell13	Cell14	Cell15	Cell16
State	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed	Passed
Rint	1.65343	1.59448	1.61438	1.5908	1.55322	1.59153	1.55912	1.58785	1.6269	1.57017	1.58859	1.59743	1.60627	1.5709	1.64164	1.69396


VCC GND SCL SDA
192.168.0.16 L:2333
Current:-13.9 T:31 °C
Restarted


















Makita
Go to the next imag






11
12
13