



Smart Charge Point Communications Controller

MANTARAY is an EV smart charge point controller add-in board providing OCPP communications and control of the charging process.

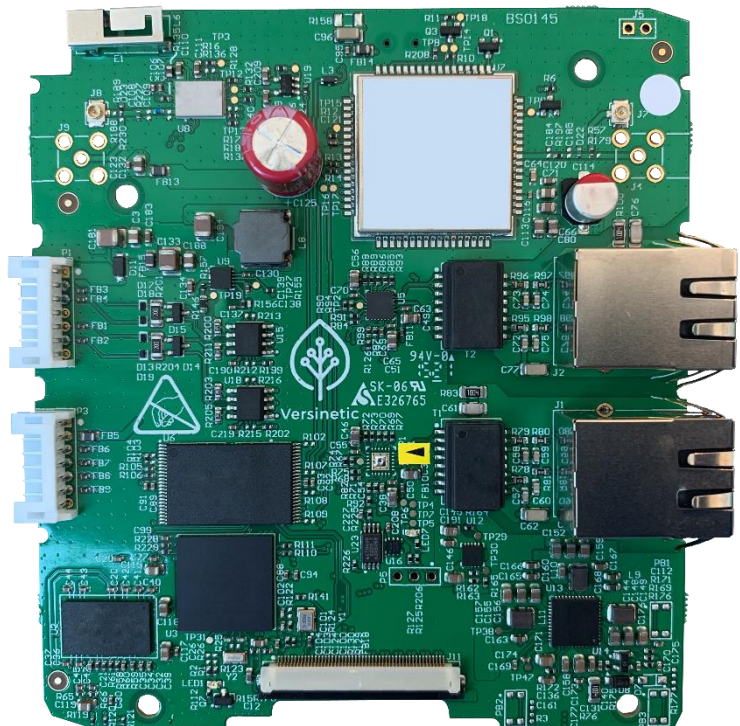
MANTARAY brings smart charging and load balancing to charge points via the industry-accepted OCPP 2.0.1, 2.0 and 1.6 communications protocol over Wi-Fi, Ethernet or mobile GPRS (2G).

MANTARAY provides USB, RS485, I2C and Ethernet communication interfaces for EVSE chargers. RS485 allows connection to mid-meters.

MANTARAY-enabled charge points can be connected together over Ethernet to provide load balancing between chargers. Dynamic load balancing with energy loads and sources is also possible. Multiple communication protocols can be supported.

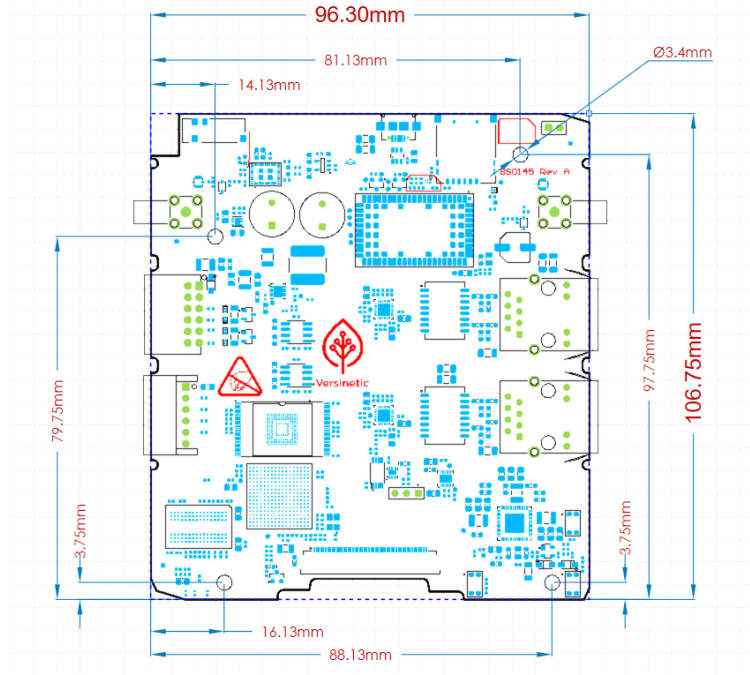
Statistics can be gathered from each charging transaction enabling intelligent control via a building management system or CSMS (Charge Station Management System). This is a key function of the management of energy assets and plays a bigger role in V2G chargers.

MANTARAY has been designed to bring smart charging and load balancing to AC and DC chargers requiring OCPP communications and load balancing that can form the heart of your smart energy management chain.

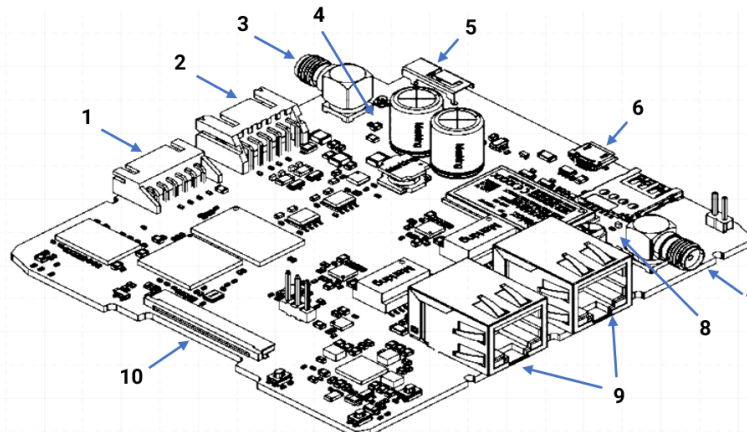


MANTARAY is incredibly flexible
 – bringing OCPP 2.0.1, 2.0 and 1.6 EV chargers

Physical Dimensions



Connector	Description
1	RS485 - 1 RS485 - 2 12V DC power input
2	I2C 3.3V DC output supply
3	SMA Wi-Fi/Bluetooth external antenna (optional)
4	UMMC (U.FL) Wi-Fi/Bluetooth external antenna (optional)
5	Wi-Fi onboard antenna (optional)
6	USB 2.0 micro USB powered port (5W)
7	SMA modem external antenna (optional)
8	UMMC (U.FL) modem external antenna (optional)
9	Ethernet connectors
10	LCD expansion connector





Smart Charge Point Communications Controller

Supply Voltage	8-15V DC
Power Consumption	Nominal 1 Watt
Processor	High processing power, ARM applications processor with Flash storage and DDR memory
Communication	On board GPRS modem (offboard antenna optional) 2x10/100Mbit RJ45 Ethernet connection Wi-Fi 2.4 GHz Bluetooth
Input/Output	I2C interface 2 x RS485 RFID interface USB 2 x 10/100Mbit RJ45 Ethernet connection LCD display expansion
kWh-meter interface	Read out of kWh-meters through RS485 connection
Workable temperature	-25 °C till +70 °C, 5% till 95%, non-condensing
Temperature Control	On-board temperature sensor on PCB
Back office connection	OCPP (JSON) 1.6 2.0 and 2.0.1 over Ethernet, Wi-Fi or GPRS
Updates	Remote firmware update
Display	High resolution screens supported

Contact Us

Versinetic
2 Devon Way
Longbridge Technology Park
Birmingham
B31 2TS
United Kingdom

+44 121 222 5433
getcharged@versinetic.com
www.versinetic.com

Versinetic is a division of ByteSnap Design

©2021 Versinetic. All rights reserved.
v1.1_26022021