

RA Ecosystem Partner Solution iVP SEMI Vehicle Control Unit Solution



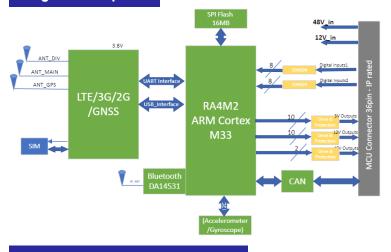
Solution Summary

iVP Semi Vehicle Control Unit is low-cost, high performance, customizable industrial grade solution for two-wheel e-mobility applications. The unit can also be used for telematic applications. ODM support can be provided to end customers. Out-of-box support is now available for the Renesas RA4M2.

Features/Benefits

- Provides most efficient IoT solution to monitor the live location, battery state of charge (SOC) and alert notification for theft & accidents
 - Integrated with made in India LTE Cat 1 module
 - Supports GNSS and BLE 5.0
 - Free RTOS with OTA options
- Monitors and controls EV I/Os for headlight, indicators, engine modes, battery, display, break status and sensors
 - 25 Digital I/Os and Isolated CAN 2.0 with various protections
 - Operating range of 5V to 15V
- Robust protection for over voltage, short circuit, over current, reverse voltage, over temperature and tamper proof

Diagrams/Graphics





Target Markets and Applications

- Two wheelers
- Telematics

www.ivpsemi.com/vehicle-control-unit



iVP Semi is an electronic products company. iVP Semi Design, develop and Manufacture core electronic components industrialized for reliability, local regulations, and sustainability.

iVP Semi is working with leading semiconductor companies to bring latest Semiconductor innovation for the EV Market

iVP Semi EV/Mobility product portfolio includes Vehicle Control Units, Smart Clusters, Software driven Smart BMS, Smart Drives, Chargers & Charging stations. iVP Semi bring expertise in Al and cloud support for Autonomous vehicle information, Last mile connectivity and vehicle to cloud solutions..











iVP Semi is also building variants of VCU and other EV products, which will cater to both high- and low-end two-wheeler segments.

iVP Semi also has supporting software for VCU including cloud connect and android app. The app and Cloud connect works on HTTP/MQTT protocol while android app has option to connect to VCU using GSM(LTE) with SMS and Bluetooth pairing.

iVP Semi's next generation VCU will have a provision drive to a Display Cluster. The VCU will be high reliable IP67 compliant with automotive standards.

iVP Semi is also working on other EV/Mobility products which includes IP67 compliant wide range battery input supported 30V-90V DC-DC converter which has capabilities to load up to 10A. Also building Industry leading battery management system which supports both Active and passive cell balancing with options for different battery chemistry and voltages, BMS has a wide input range and can drive up to 180A. iVP Semi is also working on fast charger of 1KW