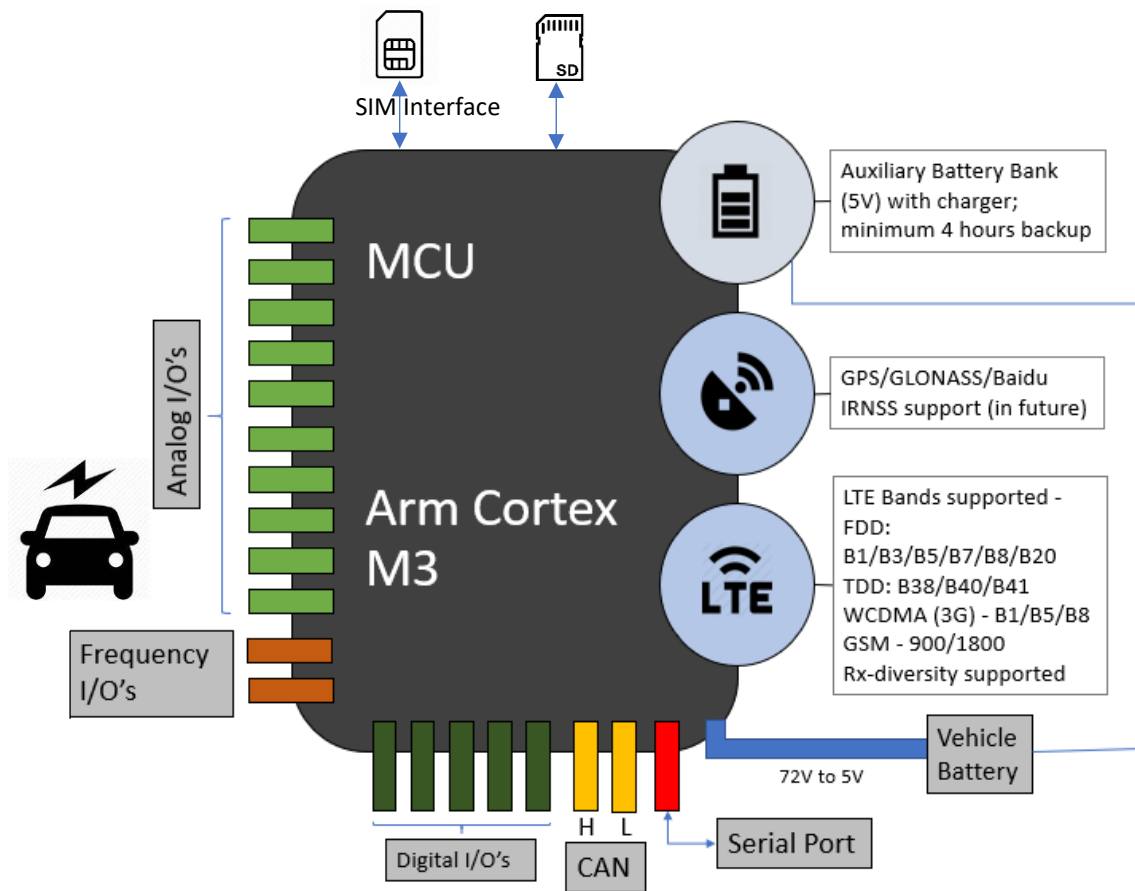


General Specifications

Feature	Specification
Operating Temperature	-25 to 80 deg C
Analog I/O	10
Digital I/O	5
Frequency I/O	2
Serial Port (RS232)	1
CAN	1
SIM	1 standard sim/dual sim/E-sim
IP Rating	IP67
Battery backup	Minimum 4 hours, up to 24 hours
IMU	Embedded 6-axis Accelerometer (till 16g), 6-axis Gyro
GNSS	GPS, GLONASS, BAIDU, Galileo, IRNSS
Antenna Capability	2 antennae (GPS + GSM) included
MCU	ARM Cortex M3

- 4G connectivity (LTE) – CAT4, Automatic SIM registration
- OTA firmware update support – Ability to flash all the devices together/one device at a time through the Cell Propulsion Mobility Platform
- Sensors supported so far:
 - Temperature sensors – NTC Thermistors (up to 5), with 5-meter data line (maximum)
 - Current sensor – Shunt resistor/ clamp HE current sensor
 - Voltage sensor – Voltage divider
 - Tachometer (motor) – HE sensor (magnets to be mounted on wheels)/S/W estimation
 - Speedometer – GPS speed + Calculated from RPM
 - Odometer – GPS based odometry + Calculated from RPM
- Control switches (for any purpose, remotely operated with our mobile app)
- Power: 5V system, peak current - 3A
 - Auxiliary battery bank (10,000mAh, variable)
 - Charger for Aux battery bank (from the main battery)
- SD card - 16/32 GB micro SD
- BLE/Wi Fi support
- Sampling time (TM): up to 3 seconds, can be selected by the user (3/5/10/15/30 seconds)
- In-built CAN removal, tampering or SIM removal alerts
- **Free** 1-year access to Cell Propulsion's Mobility Platform (Web Portal + Mobile App) for fleet management; TM, TC, data visualization and analytics. Easy integration with any cloud service over MQTT/HTTPS protocol, in case the user wants to use his/her own backend
- Wire harnessing is included with the module, customised to the customer's requirements

Functional diagram



Data Flow

