X_VCU

Vehicle Control Unit

Picture

Typical Application

- Electric Land Vehicles (bike, car)
- Electric Marine Vehicles (boat, jet-ski)
- CAN-based Control Systems
- Data Monitoring and Collection
- Industrial Application in Harsh Environment

Processor

- STM32F4 family
  - 32 bit, 168 MHz
  - Flash 1 MB, RAM 192 kB
  - 2 microcontrollers

Power

- 7-15V DC, <500mA

I/O

- Digital Inputs
  - Wake-up
  - 1 channel
- Digital Outputs
  - 12V, 2.5A
  - 2 channels
- Analog Inputs
  - 0-5V
  - 5 channels
- Analog Outputs
  - 0-5V
  - 2 channels

Communication

- CAN-bus 2.0A and 2.0B
  - ISO 11898-2, <1Mbps
  - 2 channels
- Wi-Fi
  - 802.11b/g/n
  - In-built antenna
- GNSS
  - GPS, GLONASS, Galileo
  - In-built antenna

Others

- SD card
- Real-Time Clock
- IP67 (IP6K9K capable)

Short Description

The X_VCU is a general-purpose control unit with a great variety of I/O, 2 channel high-speed CAN-bus, wireless communication, robust plastic packaging (IP6K9K) and small form factor. This device fulfils most requirements in advanced control applications. With the widely available support for the STM32F4 microcontroller, supplemented with the optional software packages, like CAN Bootloader, Wi-Fi Driver and SD Card Manager, it makes the software development much quicker. This device is equipped with 2 microcontrollers for increased performance and supervision capabilities. The Real-Time Clock helps accurately recording events.

Mechanical Parameters

Material: Nylon 6/6 (enclosure)

Color: Black

Dimensions: 118.8 x 133.0 x 36.0 mm (W x L x H)

Protection: IP67 (with mated connectors)

Weight: 255 g

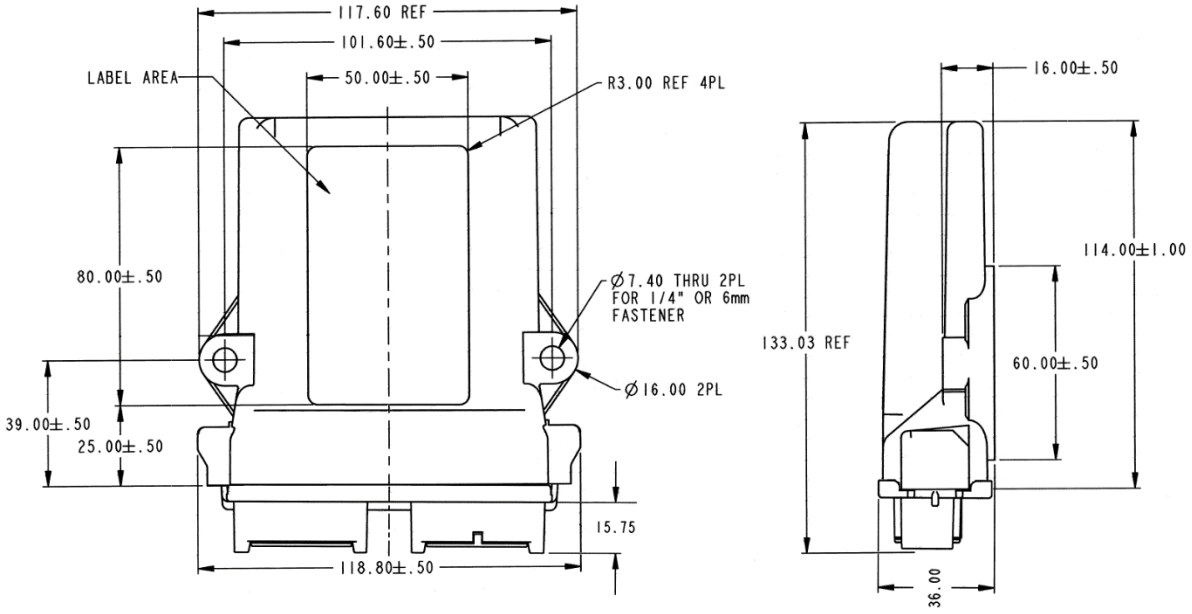

Figure 1 - Mechanical Dimensions