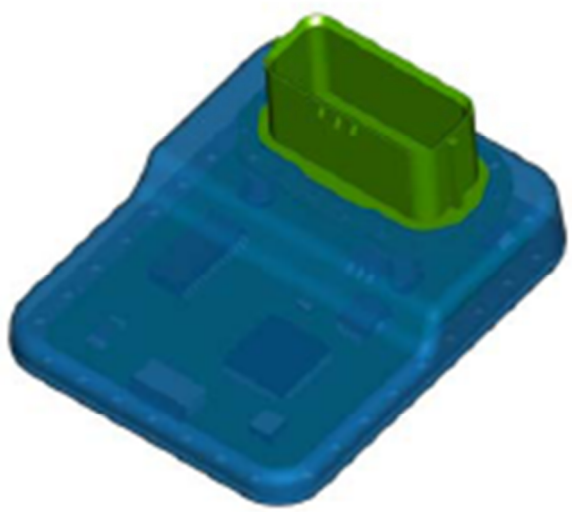
Doc. No. DS-ECM-XC2-24
Date: 12 May 2011 Revision: 1.1



Product Summary

The New Eagle™ Engine Control Module is a low-priced and reliable control solution for a four-stroke engine that offers improved engine performance through a 16 bit microcontroller and a wide range of software features ranging from programmable sensor calibrations, 3D fuel and spark maps, spark advance control to closed-loop fuel control and closed-loop idle control.

Packaged in compact dimensions with aluminum base for shock hardening and heat dissipation, this lightweight ECM consumes little electrical power and is capable of meeting strict emissions standards as well.

ECM XC2-24 also has an optional Stepper Motor Control with dedicated output pins for the same. The closed-loop idle control with stepper motor control and spark control ensures appropriate adjustment idling speed and cold start at all ambient temperatures for service life.

Electrical Specifications

Electrical Specifications	
Operating voltage	7.5V to 20V DC
Power consumption	200 mA
Operating temperature	-20 deg C to +60 deg C
Processor	16 bit, fixed point, Infineon XC2xxx
Flash memory	Up to 512 KB
Static RAM	Up to 23KB
Protection	• Overload and SC on +5V regulator • Current limitation and SC on injector driver and fuel pump
EMI protection	

Software Features

- Speed Density System
- 3D Fuel and spark maps
- Programmable Sensor Calibrations
- Closed-loop fuel control
- Fuel and Spark transient trims
- Injection Pulse Correction and Ignition Dwell correction for varying battery voltage
- Spark Advanced Control
- Engine maximum revolution
- Closed loop idle control
    - Stepper Motor Control
    - Spark Control

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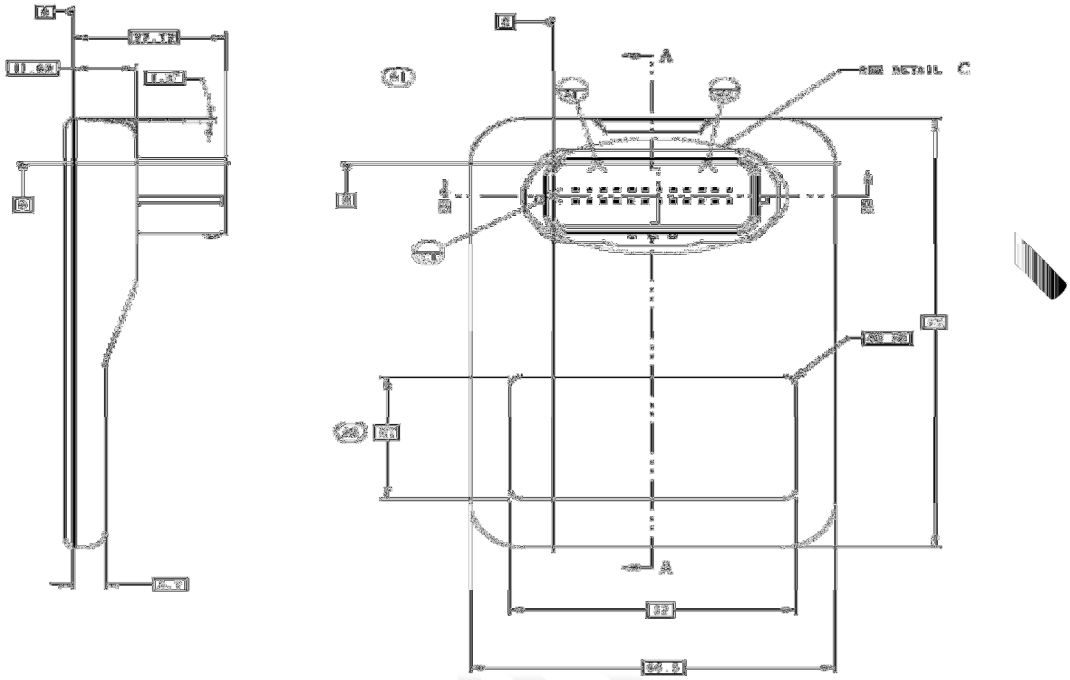
Construction Details



Mechanical Specifications

- Dimensions: 71mm X 50mm X 15 mm (LxWxH)
- Approximate Weight: 55 grams
- Low Pressure Injection Molded potted proof module
- Sealed housing waterproof container with 24 I/O pins
- Aluminum base for shock hardening and optimal heat dissipation
- Operating Temperature Range: -20 ^{o} C to +60 ^{o} C