



MotoHawk Control Solutions

ECM-5554-112-0904-C/F

Engine Control Modules Calibratable / Flash

(0904-C: 1751-6455)

(0904-F: 1751-6454)

Description

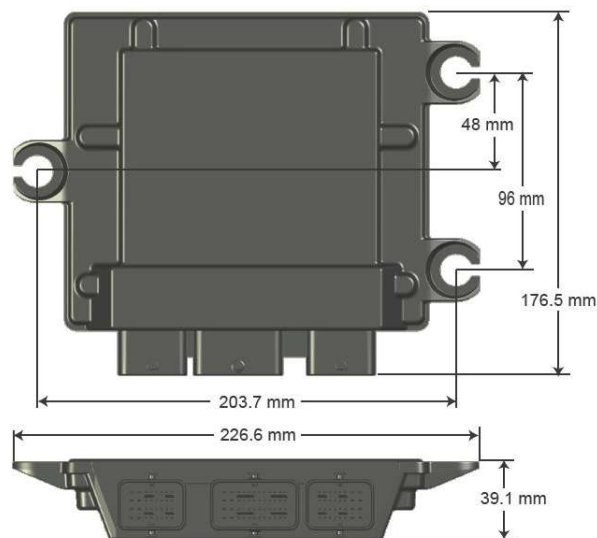
Presenting the ECM-5554-112-0904-C/F engine control modules from Woodward's MotoHawk Control Solutions product line. These rugged controllers are capable of operating in harsh automotive, marine, and off-highway applications. The module and its connector system are environmentally sealed and suitable for engine mounting in many applications.

This unit provides 112 connector pins with inputs, outputs, and communications interfaces that support a wide variety of applications.

The ECM-5554-112-0904 is part of the ControlCore[®] family of embedded control systems. The ControlCore operating system, MotoHawk[®] code generation product, and MotoHawk's suite of development tools enable rapid development of complex control systems.

Each controller is available in 'F' (Flash) or 'C' (Calibratable) versions. Flash modules are typically used for production purposes. Calibratable modules are typically for prototyping/development only; they can be calibrated in real time using MotoTune[®].

Physical Dimensions



- 112-pin platform
- **Microprocessor:** Freescale MPC5554, 80 MHz
- **Memory:** 2MB Flash, 64K RAM, + 32K Cache, 32K EEPROM
- **Calibratable Memory:** 512K (256K x2) RAM
- **Operating Voltage:** 9–16 Vdc, 24 V (jump start), 4.5 V (crank)
- **Operating Temperature:** –40 to +105 °C
- **Inputs:**
 - VR and Digital Engine Position Sensor (crank and cam) Inputs
 - 33 Analog
 - 4 Oxygen Sensor
 - 3 Speed (digital)
 - 2 Knock Sensor
 - 1 Emergency Stop
- **Outputs:**
 - 8 Injector (high impedance)
 - 8 Electronic Spark Trigger (5 V)
 - 1 Tachometer or Link Interface
 - 14 Low Side Driver Outputs
 - 1 Digital Output
 - 1 Main Power Relay Driver Output
 - 2 H-Bridge Outputs
- **Communications:**
 - 3 CAN 2.0B Channels
 - 1 RS-485 Channel

Simple Block Diagram

