



MotoHawk Control Solutions
GCM-5554-112-1001-C/F
 General Purpose Control Modules
 Calibratable / Flash

(1001-C: 1751-6457)
 (1001-F: 1751-6456)

Description

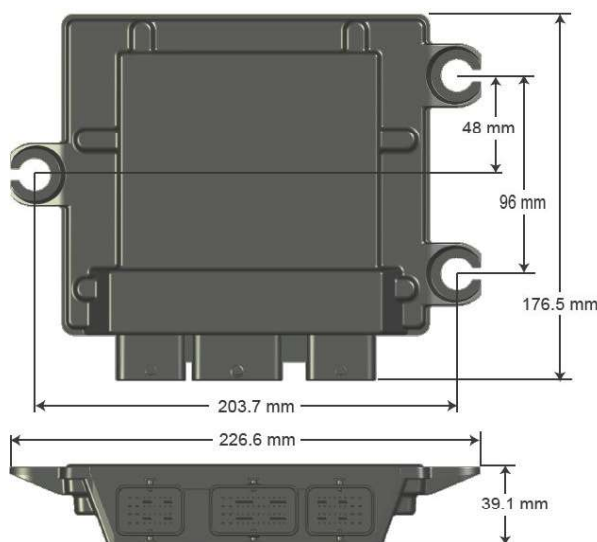
Presenting the GCM-5554-112-1001-C/F engine control modules from Woodward's MotoHawk Control Solutions product line. These rugged controllers are capable of operating in harsh automotive, marine, and off-highway applications. The module and its connector system are environmentally sealed and suitable 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 GCM-5554-112-1001 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.

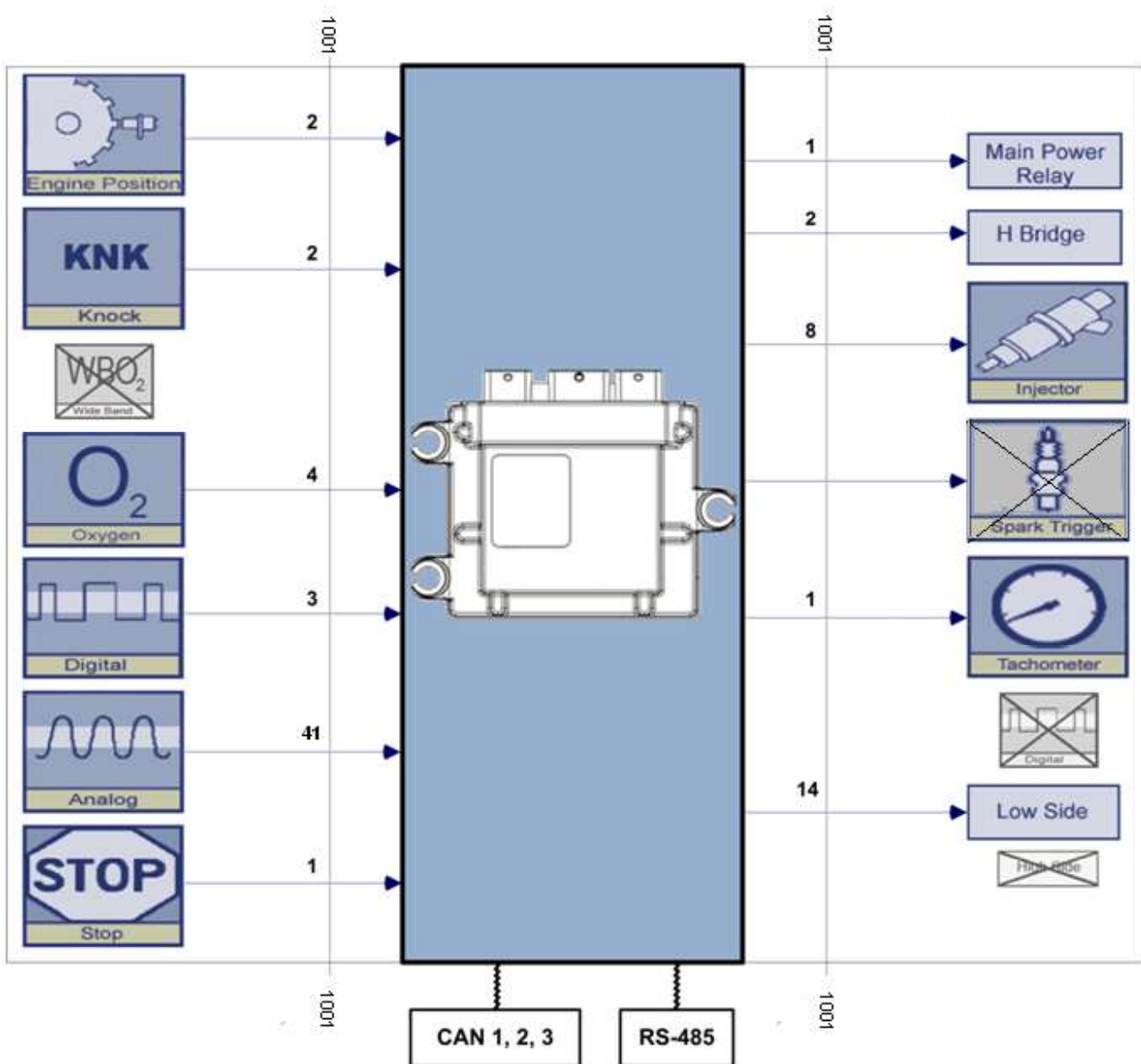
Each controller is available in 'F' (Flash) or 'C' (Calibratable) versions. Flash modules are typically used for production purposes. Calibratable modules are typically for prototyping/development only; they can be calibrated in real time using MotoTune[®].

Physical Dimensions



- 112-pin platform
- **Microprocessor:** Freescale MPC5554, 80 MHz
- **Memory:** 2 MB 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
 - 41 Analog
 - 4 Oxygen Sensor
 - 3 Speed (digital)
 - 2 Knock Sensor
 - 1 Emergency Stop
- **Outputs:**
 - 8 Injector (high impedance)
 - 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



Ordering Information

Controller	Part No.	w/Mounting Hardware	Boot Key (P/N)	Boot Cable	Desktop Simulator Harness (P/N)
GCM55541121001CP0	1751-6457	8923-1663	1635-1800	N/A	5404-1205
GCM55541121001F00	1751-6456	8923-1630			

CP0 suffix indicates calibratable (development) version of a module.

Harness	Part No.
Pigtail	5404-1215
Development Harness	5404-1216