



MATLAB
Enabled



OpenECU M250

Multi-Purpose Controller

Capabilities

- 32-bit Freescale microprocessor
- 2 CAN interfaces
- Multiple digital / frequency / analog / RTD / thermistor inputs
- Multiple digital / PWM outputs
- Protection against double and reverse battery, load dump, and overcurrent on outputs
- Open / short circuit detection on outputs
- 2 high current H-Bridges

Benefits

- Designed to allow for circuit customization to meet specific needs
- Same proven hardware can be used for prototypes and production
- Simulink® or C API are available to develop your application
- Cost effective support for fleet trials of new systems

Applications

- Diesel exhaust after-treatment
- ABS / TCS / ESC
- Hybrid vehicle control integration
- Torque management
- Aerodynamic actuator control

Specifications

MICROPROCESSOR		COMPATIBILITY	
Processor	Freescale MPC5534	Vibration	Severe (on or near suspension mounting points)
Secondary Processor	Optional	PHYSICAL	
Clock Rate	80Mhz	Dimensions (mm)	228 x 158 x 50
Code Space	up to 768KB	Weight	1.1Kg
RAM Space	832KB	Connector	46 pin
Calibration Space	256KB	Enclosure	Sealed Aluminum w/Gore-tex® vent
POWER		Location	Chassis mount
Supply Voltage	6.5V to 36V	Operating Temperature	-40°C to 105°C
Standby Current	0.1mA @ 12V	Environmental Protection	IP67
Sensor Supply	2 x 5V / 250mA	OUTPUTS	
COMMUNICATION		H-Bridge w/ Current Feedback	2 x 8A
High Speed CAN 2.0	2x	High Side Switch (non-boosted)	1 x 20A
INPUTS		Peak / Hold Low Side Injector	3 x 5A / 2A
Analog	6	PWM Low Side / Injector	1 x 8A
RTD	7	PWM Low Side / Current Feedback	1 x 10A
Angular	1	PWM Low Side / Current Feedback	1 x 0.5A
Frequency / Digital / Analog	6	Spark Low Side	1 x 8A
FEPS	1		
OPTIONAL CAPABILITIES			
Wake on CAN	1		
Daughter card slot available to expand module capabilities.			

Application Control Strategies Available in Simulink for Development

- Torque and Speed Based Engine Control Strategies
- Hybrid and Electric Vehicle Supervisory Control Strategies

