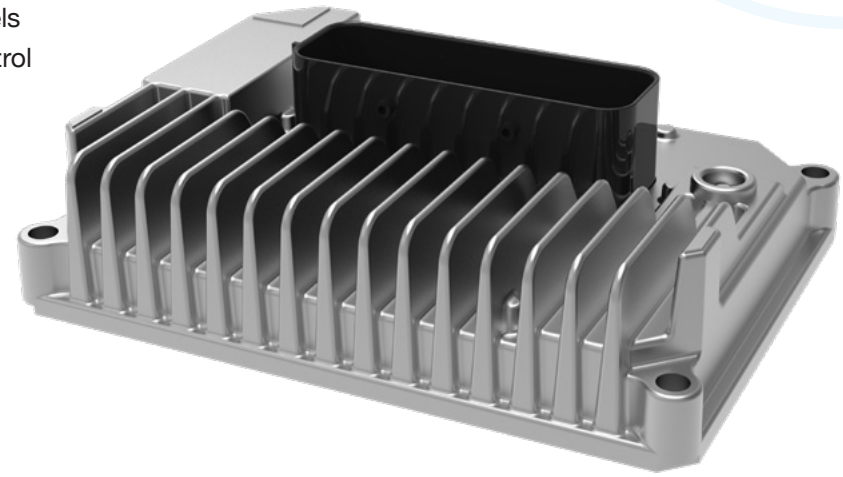
DANA OPEN ECU™ EMBEDDED CONTROL

M220
OpenECU™ Multi-Purpose Controller

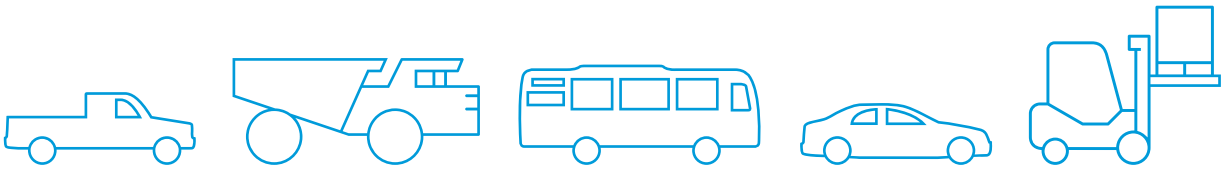
MATLAB Enabled
MathWorks Partner

Capabilities

- Fuel injectors and smart coils
- Current and voltage monitors on many output channels
- Thermal trip monitors on certain channels
- H-Bridge and high current actuator control
- Configurable analog and digital I/O
- High speed CAN channels



Ideal for light, commercial and off-highway vehicles.



M220
OpenECU™ Multi-Purpose Controller

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

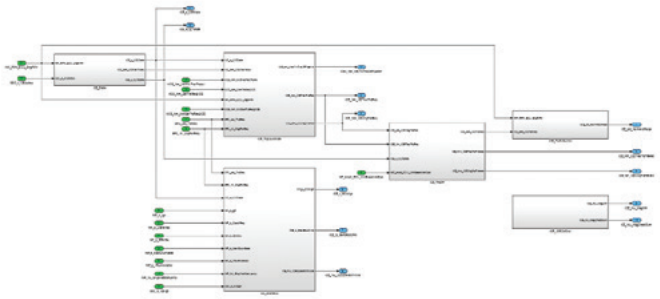
Applications

- Alternative fuel system control (e.g. CNG/LPG/LNG)
- Low cylinder count engines (up to 4)
- Hybrid supervisory control
- Diesel pump control
- Suitable for OBD compliant systems

Specifications[1]			
Microprocessor		**Compatibility**	
Processor	Freescale MPC5534	**Vibration**	6g random RMS
Clock Rate	80Mhz	**Physical**	
Code Space	up to 768KB	**Dimensions (mm)**	155 x 115 x 46
RAM Space	832KB	**Weight**	520g
Calibration Space	256KB	**Connector**	46 pin
Power		**Enclosure**	Aluminum
Supply Voltage	7V to 32V	**Location**	Chassis mount
Standby Current	0.25mA @ 12V	**Operating Temperature**	-40°C to 105°C
Sensor Supply	1 x 5V / 250mA	**Environmental Protection**	IP67
Communication		**Outputs**	
High Speed CAN 2.0	2x	**H-Bridge**	1 (2 pins) - 5A
Inputs		**High Side Switch**	1 x 15A
Analog	12	**PWM Low Side**	2 x 100mA
Differential VRS	1 x (2 pins)	**PWM Low Side**	2 x 250mA
Single Ended VRS	2	**PWM Low Side**	6 x 2A
Frequency	1	**Low Side Injector**	1 x 15A / 5A (software configurable)
Digital	4		
FEPS	1		

Application Control Strategies Available in Simulink for Development

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



OpenECU.com

Application Policy
Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.

Dana Plymouth Technology Center
47047 West Five Mile Road
Plymouth, MI 48170
Tel: +1 (734) 656 0140 Fax: +1 (734) 656-0141
OpenECU.com

© 2021 Dana Plymouth Technology Center. All rights reserved. ELECECU-M3006-0821