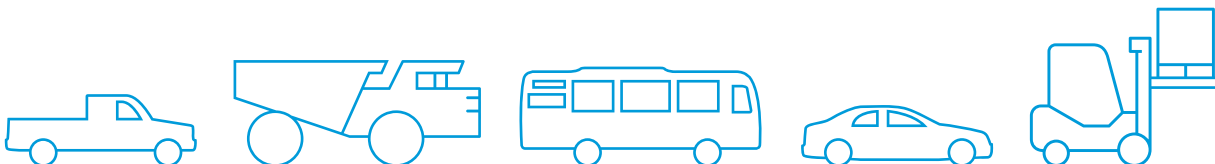# M130
OpenECU™ Multi-Purpose Controller

Capabilities

- 4 high speed CAN 2.0B channels
- LIN master
- Advanced 32-Bit NXP Microprocessor
- SPC5746B
- 80 MHz
- Up to 3MB code space
- Up to 256kB RAM space
- Up to 256kB Calibration space
- CAN-FD capable
- Wake on CAN (CANA)
- Ignition Input
- Total of 6 Analog/Digital inputs
- RTD capable analog inputs
- Software configurable delayed power off
- 2 Analog voltage output channels
- 1 5V 200mA sensor power supply output

Ideal for light, commercial and off-highway vehicles.

M130
OpenECU™ Multi-Purpose Controller

Applications

- CAN Gateway Module
- CAN to LIN Gateway
- CAN I/O Expansion Box
- Smart Relay Driver
- Embedded System Control and Supervisor
- Alternative Fuel System Controller

Specifications[1]				
Communications			**Other**	
CAN (CAN-FD)[2]	4x		**Program Status LED Drive**	Up to 9x
LIN (master)[3]	2x		**Reprogramming Enable**	1x @ 18V
Inputs			**Electromagnetic Compatibility (Targeted)**	
Ignition	1x		**Conducted Emissions**	CISPR25 Class 2
Analog	6x		**Radiated Emissions**	CISPR25 Class 2
Outputs			**Immunity**	ISO 11452-4
500mA LSD	6x		**Conducted Transients**	ISO 7637-2
2A LSD	4x		**ESD**	SAE J1113-13
5V Sensor Power Supply	1x		**Physical**	
0-5V Analog ±10mA	2x		**Dimensions**	138 x 130 x 42 mm (L x W x H)
Electrical			**Material**	PPA GF33
Output Protection	Short to Battery, Ground		**Connectors**	2 x 20 pin (Molex MX150)
Battery Input Protection	Overvoltage, Reverse Voltage		**Vibration**	ISO 16750-3 Test VII
Operating Voltage	8V to 32V		**Environmental Protection**	IP67 – sealed
Survive Voltage	-28V to 36V		**Operating Temp**	-40°C to 85°C

[1] For full details please refer to the full M130 Technical Specification

[3] LIN slave mode on 1 channel can be offered as a population change option, contact Dana for more details

The M130 OpenECU is designed for applications that require 4 CAN channels and a small controller.

Intended applications include CAN-to-CAN message forwarding, LIN-to-CAN message translation, and sensor-to-CAN data broadcasting. The M130 can whitelist specific IDs to shield one CAN bus from unwanted CAN messages on a different bus, for data protection purposes. The M130 can also be used to modify the CAN messages from one bus before transmitting them on the other bus. Using the two LIN channels and the six analog inputs, the M130 can also broadcast smart sensor data to any of its four CAN busses.