OBR Control Systems

Euro-2 ECU

Euro-2 is a modern, high technology and well developed low cost engine management system from EFI Technology.
The ECU is using a modern 80 MHz Power PC microprocessor which ensures optimum engine performance.

Features
Euro-2 can control normally aspirated, turbo charged and super charged 4, 5, 6 and 8-cylinder engines in full sequential or grouped mode. Additionally, depending upon hardware version it can handle both single ignition coils and block coils, being either inductive or having built-in power modules.
To ensure flexibility with variable camshaft timing (VCT) strategies, up to 4 individual crankshaft and camshaft sensors can be connected, being either inductive or Hall effect.

Having been developed for road car use Euro-2 offers a level of flexibility far superior to many of its rivals. High definition mapping allows development of heavily tailored maps. This ensures both the ultimate in driveability and performance. Other impressive features include programmable firing order as well as 8 programmable outputs.

The price of the ECU includes full-option software specifications. All features and strategies are available to the user at no extra cost.

Euro-2 can also accommodate a wide band lambda sensor in combination with an external controller for use with its automatic mapping feature.
A built-in barometric air pressure sensor helps obtaining correct mapping independent of weather or driving conditions.
The ECU control is able to control a drive-by-wire electronic throttle body via an external unit.

System Overview

- 80 MHz Power PC processor family
- 4 cylinders in full sequential mode
- 5, 6 and 8 cylinders in grouped mode
- Automatic fuel mapping and closed loop lambda control
- Closed loop boost control
- Variable camshaft timing with PID control
- Idle speed control
- 2 selectable engine maps
- Drive-by-Wire throttle control (requires external module)

General

- Sealed, lightweight plastic enclosure
- 35-pin automotive main connector
- Dimensions 152 x 122 x 44 mm
- Weight 340 grams

Communication

- CAN 2.0B communication interface
- CAN data export to dash and logger

Inputs

- 4 inductive or Hall effect engine speed and synchronisation sensor inputs
- 1 lambda sensor input
- 4 analogue 0..5 Volts external sensor inputs
- 1 built-in barometric air pressure sensor

Outputs

- 4 on-off fuel injector drivers
  - typical 1 A, limit 6 A
  - short circuit protection
  - open load detection
  - over-voltage and over-temperature protected
- 4 inductive or logic ignition coil drivers
  - short circuit protection
  - open load detection
  - over-voltage and over-temperature protected
- 8 low side multipurpose switches (PWM)
  - typical 1 A, limit 6 A
  - short circuit protection
  - open load detection
  - over-voltage and over-temperature protected
- 1 main relay switch
  - short circuit protected
  - over-temperatureprotection
- 1 VREF sensor power supply

Special Features

- 2 selectable engine maps
- Gear detection
- Flat shift gear shift strategy
- Launch control
- Lap timer
- Encrypted versions available

Conditions for Use

- Temperature range -30…+85 degrees C
- Power supply 6..17 volts