

Magneti Marelli SRA-E R02 Engine Control Unit



Brand: Magneti Marelli

Product Code: SRAE

Availability: 7 Days

Weight: 0.50kg

Dimensions: 20.00cm x 15.00cm x 5.00cm

Price: \$2,750.00

Short Description

SRA-E is a dedicated Engine Control Unit. A single unit can drive up to eight injectors and six ignition coils. SRA-E can also drive logic command coils or dumb coils without the need for external ignitors (SW option).

Description

SRA-E provides analogue inputs for single-ended, differential, temperature and knock-sensor as well as an interface for a switching lambda sensor. The unit also provides an H-Bridge output stage for use with suitable "Drive by Wire" actuators.

6 configurable speed sensor inputs (inductive or Hall) provide full flexibility of configuration for engine angle detection as well as other frequency inputs such as wheel or shaft speed.

SRA-EDL16 is a version of the SRA-E with an internal 16 Mbyte data logger.

Communication from the PC based configuration tool (Vision 5) and to other units (such as dashboard and logger) is by the 2 CAN lines and an asynchronous serial line.

Inside the unit there is a high performance RISC microcontroller and an FPGA for diagnostic purposes.

SRA-E is supplied with the mating connector (loom side) or Competition Systems can make a custom harness for you at extra cost.

Main Features

- 8 Single-ended
- 6 Pick-ups or Hall effect
- 6 Inductive or logic command ignition drivers (SW option)
- 8 On/Off injector drivers
- 1 H-Bridge: DC-Motor driver for “Drive by Wire” control
- 4 PWM (Current controlled PWM)
- 1 On/Off or Linear Lambda sensor
- 2 Knock input for detonation control accelerometers
- 2 CAN communication buses
- 1 Ethernet line

Technical Characteristics

Inputs

| | |
|--|---|
| Analogue Single-ended | 8 |
| On/Off or Linear Lambda sensor | 1 |
| Knock sensor (multiplexed)..... | 2 |
| K-type thermocouple..... | 2 |
| NTC/PT1000 temperature sensor (selectable) | 4 |
| NTC internal temperature sensor | 1 |
| V battery injector | 1 |
| VR Pick-ups or Hall effect | 6 |
| On/Off digital | 6 |
| Lap Trigger..... | 1 |
| “Code Load” enable pin | 1 |

Outputs

| | |
|---|---|
| On/Off injector drivers | 8 |
| Inductive or logic command ignition drivers (SW option).. | 6 |
| H-Bridges | 1 |

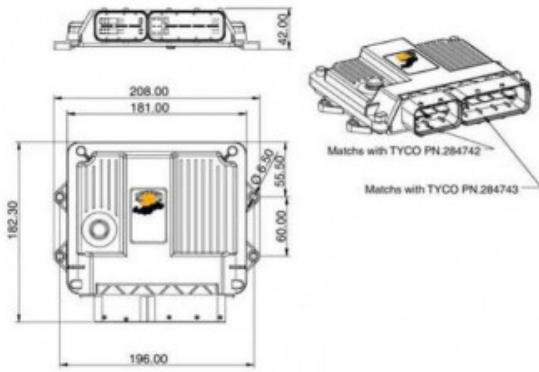
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|--|----------------------|
| Lambda heater drivers | 1 |
| PWM..... | 4 |
| Low-side On/Off | 2 |
| Voltage references..... | 2 |
| Communications | |
| CAN line (1 Mbit/s (*)) | 2 |
| Ethernet line (100 Mbit/s)..... | 1 |
| Serial current loop..... | 1 |
| (*) Configurable on request | |
| Logic Core | |
| Microcontroller (80 MIPS RISC)..... | 1 |
| FPGA (50k gates) | 1 |
| Flash E2PROM (microcontroller)..... | 1 Mbyte |
| RAM memory (microcontroller) | 48 Kbyte |
| RAM memory..... | 512 Kbyte |
| E2PROM parallel | 64 Kbyte |
| E2PROM serial | 4 Kbyte |
| Time keeper..... | 1 |
| Other Characteristics | |
| Power supply | 6 to 16 V |
| Operating temperature range (internal) | -20 to 85 °C |
| Protection class..... | IP 65 |
| Dimensions | |
| with connectors..... | 208 x 182.30 x 42 mm |
| Weight (approx.) | 960 g |

Specification

| | |
|------------|--|
| Make | |
| Alfa Romeo | |

Product Gallery

Dimensions



Application Schematics

