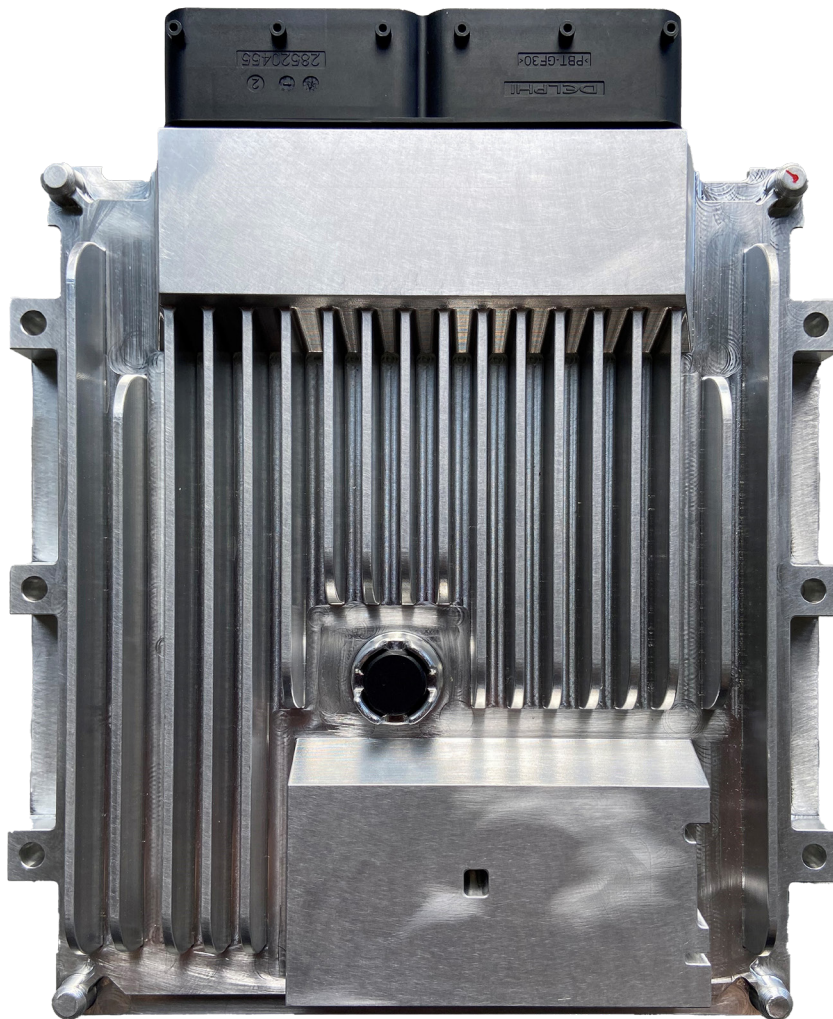


Explore our technologies

PHINIA Electronic Control Unit PECU300

For Passengers Cars and Commercial Vehicles
For Hydrogen, Gasoline and Diesel Fuel Systems

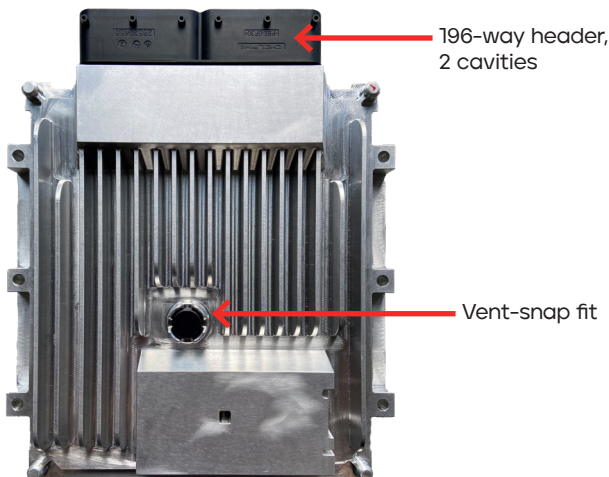


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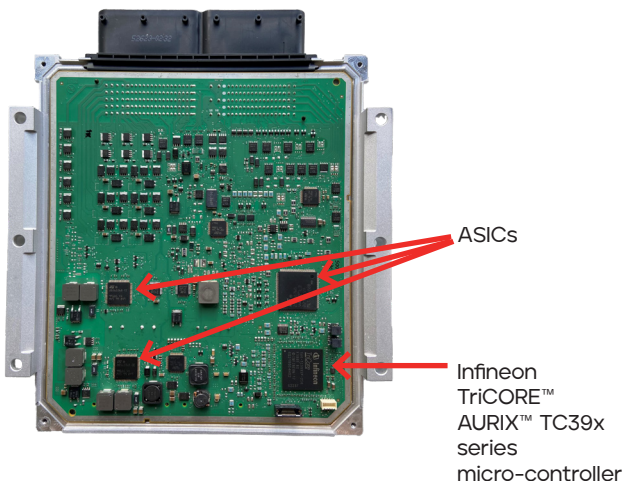
PHINIA Electronic Control Unit PECU300

PECU300 is a Control Unit able to drive the full portfolio of PHINIA products for Hydrogen, Gasoline and Diesel Systems, for Passengers Cars and Commercial Vehicles.

PECU300



PECU300 Inside



Features

- Up to 6 cylinder capability
- For 12V or 24V battery voltage
- For chassis mounting or on-engine mounting through bracket + AVM (Anti-Vibration Mount)
- Operating range: -40°C / +105°C Ambient Temperature
- Sealing: IP6K9K

Design features

- 196-way header
- Die-cast aluminium housing
- Vent-snap fit
- 6-layer FR4 PCB
- Dual side SMT
- Infineon TriCORE™ AURIX™ TC39x series micro-controller
- Highly integrated design using ASiCs allowing board space reduction and configuration flexibility
- Development interfaces: ETAS X-ETK and ATI A8

Performance

- Max System Power allowed: 420W @10V
- Large range of general-purpose inputs: Analog, Digital, Frequential, SENT
- Large range of general-purpose outputs: LSD, HSD, combined LSD/HSD interfaces with current monitoring
- 6 Fuel Injector drivers for H2, Gas, Diesel systems
- 6 Spark drivers for Smart Coils
- Pressure regulation valve drivers for H2, Gas, Diesel systems
- 6 additional Injector drivers to manage: 6 Water Injectors or 3 Lubrication Injectors for H2 or 3 SCR Dosers
- LSD outputs to drive the H2 Supply System (up to 4 tanks)

Explore our technologies

PHINIA Electronic Control Unit PECU300

Performance

- Up to 3 Phase-Boost 65V switched power supply for injector drivers to allow highly loaded multi-injection profiles. Nominal set-up with 2 Phase-Boost.
- 3 Knock sensor or accelerometer sensor interfaces
- 2 Linear O2 interfaces compliant with BorgWarner, Bosh, NTK and Denso sensors
- 2 Binary O2 sensor interfaces
- 4 configurable VR/HE sensors interfaces
- 4 H-Bridges
- 4 CAN transceivers: 2 CAN with FD Flexible Data and PN Partial Networking and 2 CAN with FD only. Support J1939 & J1979, UDS, ISO 27145, 11898-2 protocols
- 2 LIN transceivers
- Internal barometric + temperature sensors
- Functional safety: ISO26262 ASILC
- Cyber security: ISO 21434 and R155

Benefits

- Generic ECU able to drive all PHINIA Fuel Systems products for H2, Gasoline and Diesel.
- Compliant with all vehicle supply architecture: 12V / 24V, T87 supply with external power relay or T30 supply with internal power relay
- Suitable for a wide range of applications from Passenger Cars to Commercial Vehicles (Medium Duty and entry range of Heavy Duty)
- Available to support customer advanced developments with PHINIA platform software.