

ECUProg NewsLetter

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**ADDRESSING THE NEEDS OF END - OF - LINE (EOL) ECU PROGRAMMING
& VARIANT MANAGEMENT**

中文的版本很快就可以发布了...



BOSCH
Invented for life



ECUProg GOES WIRELESS...

Wireless support is now available

- ▶ The distance from the PC and the engine / vehicle can be longer (35 meters and above)
- ▶ No cables between PC and engine / vehicle – this ensures that there will be no problem on the production line even when the engine / vehicle is moving
- ▶ Wireless strategy will optimise ECU programming time at the EOL. Considerable reduction in production time can be achieved as ECU programming can happen parallel to other assembly activities

DNOX ECU (DCU 2.0) support is now available

- ▶ A Dosing Control Unit (DCU) is used to reduce Nitrogen Oxides (NOx) in exhaust gas by injecting Adblue (32.5% Urea water) solution, using Selective Catalytic Reduction (SCR) technology.
- ▶ The primary application of this system is for heavy duty diesel trucks, light duty vehicles and passenger cars, to comply with emission norms such as EURO V, US07/10.

Support for Oracle RDBMS in addition to MySQL

Current ECU Support

- ▶ EDC15VM+
- ▶ EDC16C39
- ▶ EDC7UC31
- ▶ EDC16UC40
- ▶ DCU (DNOX) 2.0
- ▶ MEDC17 (PL-V)

Communication

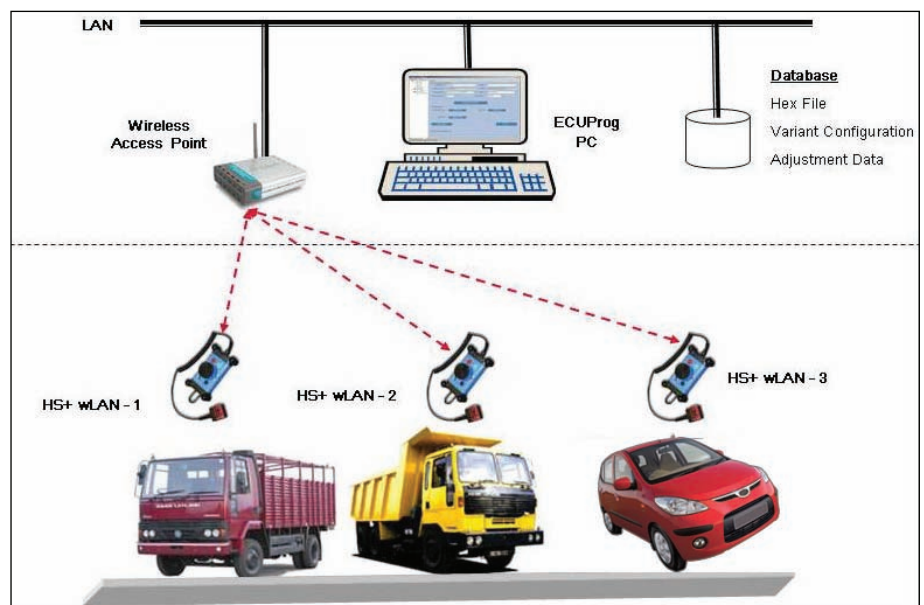
- ▶ Kline
- ▶ CAN

Overview

- ▶ ECUProg (Copyright January 2007) is a solution that helps Automotive OEMs to manage the Engine/Vehicle variants at their production lines. At the Bosch ECU factory, the software code and the dataset will be programmed into the ECU. However, it is possible for the customer to re-program a new

dataset / code or select from a set of programmed dataset using ECUProg.

- ▶ The tool helps in variant management – identification of variants and programming corresponding software into the ECU & helps in putting engine test data into the ECU. ECUProg helps in injector quantity adjustments to program IMA codes (Injector production tolerances). ECUProg also has the facility to read & write data and other ECU parameters to the FLASH and EEPROM of the ECU.
- ▶ ECUProg is in use with various OEM production lines in India, China, Poland & Germany.
- ▶ A typical setup of ECUProg at an EOL (with network support) is shown in the picture below



ECUProg: wLAN Strategy at EOL (Example)

ECUProg Features

- ▶ Multiple ECU support
- ▶ Variant Management
- ▶ Network / Wireless enabled
- ▶ Customisation / Integration
- ▶ Designed for production environment
- ▶ Passenger car & Commercial vehicles support
- ▶ Multilanguage Support

ECU Programming Activities

- ▶ Read ECUID
- ▶ Flash Programming (CODE, DATA, EOL Areas)
- ▶ VIN Programming
- ▶ VDS Selection (Variant Dataset Selection)
- ▶ Engine Adjustments
- ▶ IQA (Injector Quantity Adjustments)
- ▶ Read/Clear Error memory

ECUProg Modules

Administrator

Administrator module users are people from the engineering departments of the engine/vehicle manufacturer, in charge of managing the EOL for ECU Programming activities. All configurations required for an ECU Project (VC – Variant Configuration) and datasets (released from Bosch) are uploaded into the ECUProg database by the administrator.

Operator

ECUProg Operator selects a VC (either by scanning a barcode representing the VC OR manually) released by the administrator for a specific EOL Station. Operator can carry out one or more activities at the EOL station as configured by the administrator.

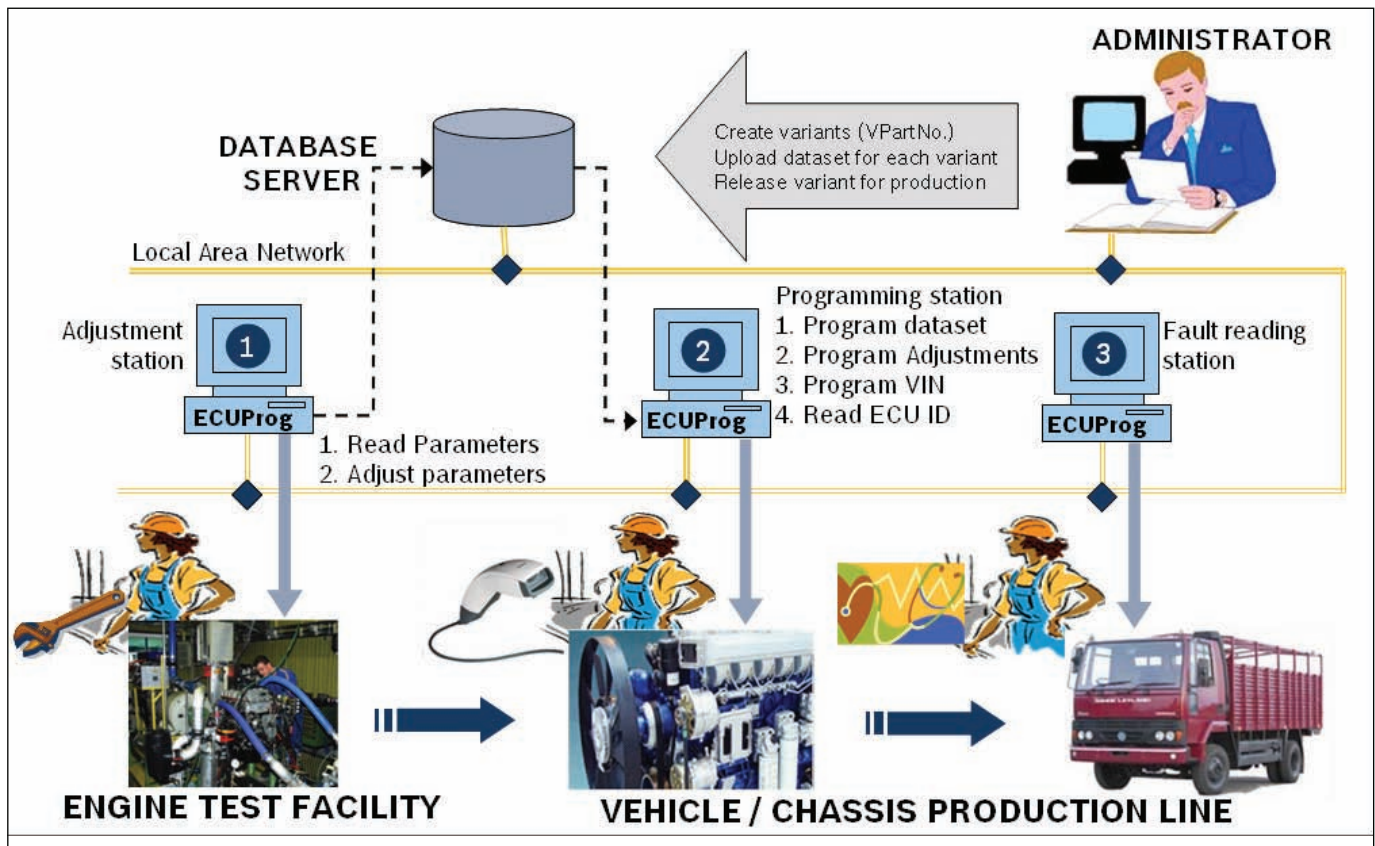
Additional Services

- ▶ Extensible architecture to integrate with external applications / systems (Existing OEM IT setup /Database / Test bench software)
- ▶ Annual Maintenance Contract (AMC)
 - ▶ Software updates
 - ▶ Telephonic/email support
- ▶ Support for additional ECU (EMS, Airbags, ABS, Dashboard, Chassis ...) on need basis

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ECUProg Usage