Just-in-Time Module Flash Station

Hardware features
- Industry-standard, off-the-shelf components
- Core Systems Industrial Touchscreen PC running Microsoft® Windows 7®
- Vector CANCaseXL devices (providing six CAN channels) capable of 1-Mbps data rates
- Zebra 105 SL label printer
- Support for ECU module and latch-locking fixtures
- Support for Matrix, SICK barcode scanners

Software features
- High-speed flashing for just-in-time delivery of application code to modules at assembly line
- Ability to write VIN, calibration parameters to modules after flashing
- End-item barcode label printing and verification
- Use module fixtures to provide convenient and secure connections, sequencing control when using multiple stations
- Support for flashing Bosch, Continental engine, and engine/transmission ECUs
- Expandable/future support for other ECUs (Magnetti, Delphi)
- Graphical user interface provides easy to understand loading/unloading instructions, job information, status/progress indication, and print/apply prompt
- Colored panel light control scheme for convenient communication of process status to operator anywhere in the workspace
- Menu system provides access to diagnostics, including a powered output self-test

Delivering the last ECU software directly to plant floor

Dynetics Flash Station provides 100 percent error-proofed ECU software downloads with minimal operator input. The station can be used in conjunction with a server to automatically sequence ECU flashing to assembly line order and provide performance results to plant quality systems. It may also be used in a standalone operating mode to give the user the choice of software to flash. The flash station enables just-in-time delivery of the latest ECU software to the plant floor at the point of module installation. Suppliers can provide modules with a single generic software configuration. Plant stock is reduced to a minimum and engineering changes get implemented in real time, eliminating scrap and rework.

The station consists of off-the-shelf, industrial-rated components, UPS, PC, and touch-screen display. It provides quick-look status lights, as well as a detailed graphical user interface showing ECU information and flash progress. It contains six independent CAN channels to allow for parallel flashing of multiple modules. It is also equipped with a Zebra label printer for printing updated ECU labels, as well as barcode scanners for label verification.
Innovating Unique Capabilities Since 1974

At Dynetics, we help customers accomplish complex, high-value missions. By combining the capabilities of a large business with the responsiveness of a small business, Dynetics put in place extensive R&D capabilities and deep technical expertise in systems engineering, systems analysis, modeling and simulation, cyber, software development, rapid prototyping, test and evaluation, manufacturing, integration, and operations. Using our considerable engineering, scientific, and other technical resources, we help customers identify, analyze, and respond to complex threats to their missions.