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

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.