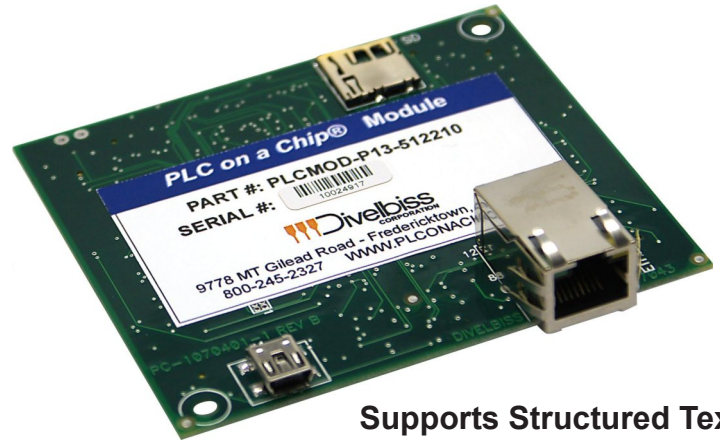


- ▶ Full Featured Industrial PLC
- ▶ Pluggable Module Construction
- ▶ Programs with EZ Ladder[®] Software
- ▶ No Low Level Programming Required
- ▶ Easy to Integrate
- ▶ Quick to Market Solutions
- ▶ Ladder Diagram with Structured Text
- ▶ Modbus Master / Slave / Modbus TCP
- ▶ Ethernet Port
- ▶ Large Number of I/O and Features
- ▶ CAN & Serial Ports Available
- ▶ SD Card Support
- ▶ J1939, NMEA 2000 & OptiCAN Networking

**Now Supports J1939 and
NMEA 2000 Networking**



Supports Structured Text

Designed to provide embedded intelligence in OEM products, the P-Series PLC on a Chip[®] Module is a cost-effective programmable logic controller packaged in pluggable circuit board module. All I/O and integrated functions are pre-assigned for use within the Divelbiss EZ Ladder[®] PC based, industrial ladder diagram software. The full featured P-Series PLC on a Chip Module and EZ Ladder combination provides for solutions that are both versatile and easy to implement.

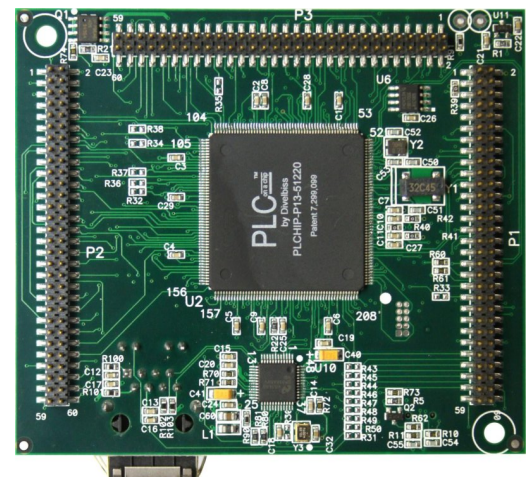
Divelbiss Development Kits include a library of pre-designed, drop-in circuitry for I/O, power supply, communications and other supporting components. The library provides all information required to implement P-Series PLC on a Chip Module and the peripheral circuitry, including PCB layout requirements, standard part numbers, and more.

Divelbiss also offers a cost-effective Design Program using PLC on a Chip technology for instances when PCB design project time or expertise is not available.

P-Series PLC on a Chip provides the ability for custom functions and function blocks using built-in Structured Text support. These custom functions and function blocks are ideal when customized functionality is needed or when customized communications drivers are required.

Advantages of a PLC on a Chip Module Solution:

- ▶ Adds Intelligence by Embedding the PLC
- ▶ Low Integration Cost
- ▶ Quick to Market Solutions
- ▶ Full Factory Support
- ▶ Pre-designed Circuits Library
- ▶ No Low Level Programming
- ▶ RAPID Design Program Available
- ▶ Protects Intellectual Property



SPECIFICATIONS

System Capacity	PLCMOD-P13-512210
Flash Memory	256K Bytes Ladder Program Storage
EEPROM Memory	4000 Bytes (Internal PLC on a Chip)
RAM Memory	32K Bytes Program Exe & Variables
Power Supply	3.3VDC
Package Type	Plug in Module
# of Pins	3 Dual Row Connectors, 60 Pins each
Size	3.625" Width x 3.125" Length x 1.000" Height
Temperature Range	-40 to 85 Degrees C
Retentive Memory	Up to 480 bytes using installed FRAM Device
Communications*	
Programming Ports	1 TTL Programming Port
General Purpose Serial Ports	4 TTL Ports, 1 Supports Handshaking
ASCII / RTU Communications	Yes
Modbus Master / Slave Serial	Yes
Serial Ports Baud Rate	up to 115.2K Bps
CAN Ports	Yes, 2 TTL Ports - J1939, NMEA 2000, OptiCAN
Ethernet Port	1 Port (RJ45), Programming or Modbus TCP
USB Ports	1 Ports (Mini USB), 1 TTL Port - Future Expansion
SD Card Port	1 SD Memory Card Interface, Micro SD Socket
Input / Output*	
SPI Serial Interface Port	2, TTL Level
I ² C Ports	2, TTL Level, 1 Mbit/s Data Rate
Analog Inputs	Up to 8 Channels, 0-3.3VDC Input, 12 Bit
Analog Outputs	Up to 1 Channel, 0-3.3VDC Output, 10 Bit
PWM Outputs	12 Channels (TTL), 32 Bit
Counter / Timer Inputs	3 Inputs, 32 Bit (TTL)
Quadrature Inputs	1 Quadrature Input (TTL) - A, B, Index
LCD Port	Support LCD Display (TTL) (HD44780 compat)
Keypad Port	Supports Keypad Matrix of 5 Col / 4 Row (TTL)
Digital I/O	Up to 143 TTL Digital I/O Points
Real Time Clock	Yes**
Programming	
Program Language	Ladder Diagram, Function Blocks and Structured Text using EZ LADDER [®]
Function Blocks	Yes
Structured Text	Yes
Scan Time	Variable, Based on Program Size
Error Checking	Yes, during program compilation
Real Time Monitoring	Yes
Text Notes	Yes
# of Instruction/Blocks	>90

* Feature Quantities shown are Maximum total (up to). Multiple feature pin functions are shared. See the P-Series PLC on a Chip Module Data Sheet for details.

** Requires Module Modifications - See Module Datasheet.