



The P-Series PLC on a Chip Development Kit is a development tool for the P-Series PLC on a Chip. Included is the complete library of documentation required to apply P-Series PLC on Chip at the module and integrated circuit level, the development board and the EZ LADDER Toolkit software.

This package allows you to develop and test your hardware designs utilizing on-board circuitry and providing a solderable 'perf' board for circuit prototyping. While the P-Series PLC on a Chip hardware design is in process; the development kit allows ladder diagram development and completion of the project in shorter time. Once the hardware is complete, simply download and run your application without any re-programming.

The P-Series PLC on a Chip Module plugs into the development board using dual row connectors and through the development board you gain access to the PLC on a Chip Module's I/O and features.

The development board provides the necessary power requirements for the PLC on a Chip Module, only requiring a 12VAC or 12VDC input using the provided terminal block or barrel connector (allowing power from a wall-mount power supply). In addition to the power supply, the development board provides the programming port connections via a 9-pin DSUB connector (male). Additional headers are provided that accept serial port modules (RS232, RS422 and RS485). A board-mounted type A USB (Host) connector is also provided for future USB supported items.

Additional features such as SD Card, USB and Ethernet are located on the PLC on a Chip Module. On the development board, multiple "P" connector thru-hole solder pads are provided for access to additional module features and a solderable 'perf' board area is ideal for prototyping thru-hole circuits.

The **PLCDK-P13-01** P-Series PLC on a Chip® Development Package contains the following:

Qty	Part Number	Description
1	PLCMOD-P13-51220	PLC on a Chip® Module with 256K Flash, 2 Serial Ports, 2 Can Ports
1	BM-1070401-02	P-Series PLC on a Chip Development Kit Board
1	PLCDKCD-P13-01	P13 Development CD with Design Documentation
1	EZLDCD-01	EZ Ladder Software CD
1	PLCDKPS	Wall Mount Power Supply
1	126-102860	Null Modem Cable
1	138-106865	USB to RS232 Serial Adapter

Serial Port Modules may be purchased separately.

PLCDK-P13-01 SPECIFICATIONS

P-Series PLC on a Chip® Module

PLCMOD-P13-512210	
System Capacity	
Flash Memory	256K Bytes
EEPROM Memory	4000 Bytes
RAM Memory	32K Bytes
Power Supply	3.3VDC
Real Time Clock	Yes
Package Type	PCB
Size	3.625" x 3.125" x 1.00"
Temperature Range	- 40 to 85 Degrees C
Communications*	
Serial Ports	1 TTL Programming Port 4 TTL Multipurpose Ports
ASCII / RTU Communications	Yes
Modbus Master / Slave	Yes
Serial Ports Baud Rate	up to 115200 Bps
CAN Ports	Up to 2, OptiCAN
Ethernet Port	Yes. Program or Modbus TCP
USB Ports	1, Mini-USB on Module 1, B type USB on Dev Board
SD Card Port	Mico SD Card Socket
Input / Output*	
SPI Serial Interface Port	2, TTL Level
I ² C Bus	2, TTL Level
A/D Inputs	8 Channels, 0-3.3VDC, 12 Bit
A/D Outputs	1 Channel, 0-3.3VDC, 10 Bit
PWM Outputs	12 Channels, 32 Bit (TTL)
Counter / Timer Inputs	3 Inputs, 32 Bit (TTL)
Quadrature Inputs	1 Input, A, B, Index (TTL)
LCD Port	Yes (TTL)
Keypad Port	5 Row / 4 Column Matrix
Digital I/O	Up to 143 Digital I/O Points

*All quantities show are maximum available each category. As pins share functions, not all features may be available. Consult the PLC on a Chip Module Datasheet for details.

Optional Accessories

PLCDK-RS232	Serial Port Module, RS232
PLCDK-RS422	Serial Port Module, RS422
PLCDK-RS485	Serial Port Module, RS485

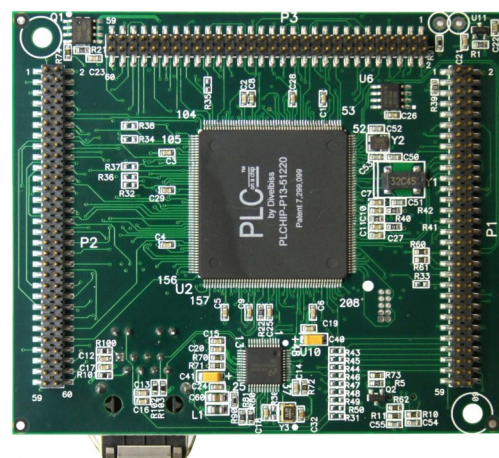
Development Kit Main Board

BM-1070401-02	
Input Power	12VAC or 12 VDC
Program Port	RS232
Watchdog LED	Yes
Serial Port Module Slots	3
USB Port	A Type, Host (Future Expansion)
Power Supplies	+5VDC, +3.3VDC, 12VDC
Other Connections	P4 - P6, 60 Pin Solder Pads
Circuit Area	2.25" x 3.0" Solderable Pads
Size with I/O Modules	9.85" x 8.28" x 1.7"
Mounting	Rubber Feet / Screw Hole

BM-1070401-02



PLCMOD-P13-512210



NOTE: Specifications are subject to change without notice.