

- ▶ Full Featured Industrial PLC
- ▶ Fully Integrated Single IC Construction
- ▶ Programs with EZ Ladder® Software
- ▶ No Low Level Programming Required
- ▶ Easy to Embed
- ▶ Quick to Market Solutions
- ▶ ASCII Communications
- ▶ J1939 Connectivity Available
- ▶ Modbus Slave Available
- ▶ PWM Outputs Available
- ▶ CAN Ports Available



Designed to provide embedded intelligence in OEM products, the patented* PLC on a Chip® is a cost-effective programmable logic controller packaged in a single integrated circuit. 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 PLC on a Chip controller 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 PLC on a Chip and the peripheral circuitry, including PCB layout requirements, standard part numbers, and more.

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

Advantages of a PLC on a Chip Solution:

- ▶ Adds Intelligence to a Product 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
- ▶ Increased Product Value
- ▶ Increased Replacement Parts Sales

*Patent 7,299,099

SPECIFICATIONS

System Capacity	PLCHIP-M2-12800	PLCHIP-M2-25600	PLCHIP-M2-2562X
Flash Memory	128K Bytes	256K Bytes	256K Bytes
EEPROM Memory	2K Bytes	4K Bytes	4K Bytes
RAM Memory	8K Bytes	12K Bytes	12K Bytes
Power Supply	5VDC	5VDC	5VDC
Package Type	112LQFP Package IC	112LQFP Package IC	112LQFP Package IC
Temperature Range	-40 to 85 Degrees C	-40 to 85 Degrees C	-40 to 85 Degrees C - 0 -40 to 105 Degrees C - 1 -40 to 125 Degrees C - 2
Communications			
Built In Ports	1 TTL Programming Port	1 TTL Programming Port 1 TTL Multipurpose Port	1 TTL Programming Port 1 TTL Multipurpose Port
ASCII Communications	Yes	Yes	Yes
Baud Rate	9600 - 57600 Bps	9600 - 57600 Bps (115200 Modbus)	9600 - 57600 Bps (115200 Modbus)
CAN Ports	No	No	Up to 3 (1 to include J1939 support)
Input / Output			
SPI Serial Interface Port	2, TTL Level	2, TTL Level	2, TTL Level
A/D Inputs	8 Channels, 0-5VDC Input, 10 Bit	8 Channels, 0-5VDC Input, 10 Bit	8 Channels, 0-5VDC Input, 10 Bit
PWM Outputs	8 Channels, 8 Bit	Up to 8 Channels, 8 Bit	Up to 8 Channels, 8 Bit
Digital I/O	33 Inputs, 33 Outputs Direct or 33 Inputs, 20 Outputs + 256 Ext. Pts	33 Inputs, 33 Outputs Direct or 33 Inputs, 20 Outputs + 256 Ext. Pts	33 Inputs, 33 Outputs Direct or 33 Inputs, 20 Outputs + 256 Ext Pts
Programming			
Program Language	Ladder Diagram and Function Blocks using EZ LADDER®	Ladder Diagram and Function Blocks using EZ LADDER®	Ladder Diagram and Function Blocks using EZ LADDER®
Function Blocks	Yes	Yes	Yes
Scan Time	Variable, Based on Program Size	Variable, Based on Program Size	Variable, Based on Program Size
Error Checking	Yes, during program compilation	Yes, during program compilation	Yes, during program compilation
Real Time Monitoring	Yes	Yes	Yes
Text Notes	Yes	Yes	Yes
# of Instruction/Blocks	>60	>60	>60
Types of Instructions	Contacts Coils Counters Timers Control Relays Math Functions Bit Manipulation Drum Sequencers Floating Point / boolean / integer Closed Loop Control Functions	Contacts Coils Counters Timers Control Relays Math Functions Bit Manipulation Drum Sequencers Floating Point / boolean / integer Closed Loop Control Functions Communications Functions	Contacts Coils Counters Timers Control Relays Math Functions Bit Manipulation Drum Sequencers Floating Point / boolean / integer Closed Loop Control Functions Communications Functions
Automatic Revision Ctrl	Yes	Yes	Yes
Windows Based	Yes	Yes	Yes

NOTE: Specifications are subject to change without notice.

2004002.7