

# PLCmodule-C32

# Programmable Compact PLC

The PLCmodule-C32 is a compact Programmable Automation Controller (PAC) based on the PLCcore-5484 with pre-installed Linux OS and IEC 61131-3 programming system. The compact design and the high amount of on-board I/Os make the PLCmodule-C32 a very cost-attractive solution for dedicated machine automation tasks.



**Target Applications** 

**Building Automation** 

**Intelligent Communication Gateway** 

Machine control



CANopen-based automation systems require performant controllers which not only implement the application functions, but also deal with network management tasks and node supervision. CANopen offers open-standard and highly-sophisticated methods to ensure the reliable operation of attached CANopen nodes within an application scenario.

The PLCmodule-C32 features a CiA 302/405 compliant CANopen Manager with network scan and automatic node configuration functionality that is tightly integrated into the IEC 61131-3 runtime system. It comes with integrated Ethernet communication, 3 UARTs and 2 CANopen interfaces. All communications ports are accessible from within the IEC 61131-3 application.

The integrated CANopen Manager allows for easy I/O extension via CANopen remote I/O devices. Each remote I/O point is easily and transparently accessible to the IEC 61131-3 application using a symbolic name. All communication tasks related to communicating the variable values over CANopen is completely handled by the CANopen Manager in the PLCmodule-C32.

SYS TEC electronic supports open standards. The PLCmodule-C32 is a fully CANopen standard compliant controller that allows for integration of any third-party CANopen device. SYS TEC electronic also provides the Shared Process Image API by which the user can easily envelop and integrate own C/C++ application code into the PLC firmware.

#### **Customer-specific customizations**

In spite of its compact design, SYS TEC electronic has put considerable effort on maintaining a high flexibility regarding customized product variations. The PLCmodule-C32 can easily be modified to meet specific customer needs.

The scope of customer-specific modifications ranges from customized assembly of I/O components on the existing I/O carrier board to a full-custom design of a new I/O carrier board incorporated in the existing PLCmodule-C32 housing.

For customers who plan to integrate the PLCmodule-C32 in their own devices may use the PLCmodule-C32 as PCB-only version without enclosure.

SYS TEC electronic offers various brand-labeling options for OEM customers who want to use the PLCmodule-C32 under their own corporate identity.

Just contact us to discuss your specific needs and how SYS TEC electronic can realize your product solution.

## **About SYS TEC electronic**

**SYS TEC electronic GmbH** is a system house for distributed automation technology. We provide an comprehensive service from consulting to OEM integration.

Founded in 1990 in Germany SYS TEC electronic has more than 20 years experience in customized development of microcontroller systems and industrial communication.



CiA 302/405 compliant CANopen Manager

Fast 200MHz 32-bit CPU

Runs IEC 61131/PLC and Linux application simultaneously

**Shared Process Image for communication** between C/C++ and PAC application

2 CANopen interfaces, each configurable as Manger or Slave according to CiA standards

Integrated Ethernet communication (TCP/IP, Webserver, FTP)

High density of analog and digital I/O in a compact housing

SmartPLC runtime kernel to execute IEC 61131-3 applications

Linux OS including Telnet, FTP and Web Server pre-installed

Free re-distribution of the IEC 61131-3 development system to the end customer

Sample integration of the Modbus protocol stack is available as Shared Process Image application

#### **Feature Overview**

32-bit Freescale MCF5484 Controller

System Clock 200 MHz

**RAM** 64MB DDR-SDRAM

Flash 16MB NOR

Ethernet 10 / 100 Mbps

CAN / UART 2/3

I/O Configuration 24 Digital inputs 24VDC

16 Digital outputs 24VDC/500mA 4 Relay outputs 250VAC/3A

4 Analog inputs 0-10VDC (0-20mA),

2 Analog outputs 0-10VDC

Others 2 PWM outputs 24VDC/500mA

3 Fast counter inputs 24VDC (50kHz)

**Battery-backed RTC** Temperature sensor

HTML-based configuration via WEB Browser

Remote login via Telnet

Linux, IEC 61131-3 runtime system, On-board Software

CANopen Manager, HTTP and FTP server

Function block libraries Communication: CANopen®, Ethernet, UART

Hardware components: RTC, Counter, PWM

Programming IEC61131-3 and C/C++

**Dimensions** 160 x 90 x 75 (LxWxH, in mm)

Housing IP20 plastic enclosure, DIN-rail mountable

#### Related **Products**









CANopen I/O module series



#### **OpenPCS Starter Kit**

- IEC 61131-3 compliant development system (full version)
- CANopen configuration tools (trial versions)
- PLCmodule-C32
- USB-CANmodul1
- Cable set, connector set
- Documentation and Software on CD

### Ordering Information

3090002 PLCmodule-C32

KIT-160 OpenPCS Starter Kit (C32)

For quotations please contact us:

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