SYS TEC ELECTRONIC

PLCcore-F407

Low-cost Industrial Control Platform

The PLCcore-F407 is built for applications where minimal costs are essential. The architecture of this insert-ready OEM-able single board computer is designed in a way to provide a broad I/O configuration at the lowest cost. The PLCcore-F407 is equipped with an IEC 61131-3 runtime kernel and a seamlessly integrated CANopen, Modbus and Ethernet communication. It is the ideal platform for developments of PLC systems and small machine controls.

- Cortex™ M4-based System on Module
- Optimized for Low-cost Applications
- CANopen Master/Slave Connectivity
- IEC 61131-3 Programmable
- Ethernet Communication

IEC 61131-3

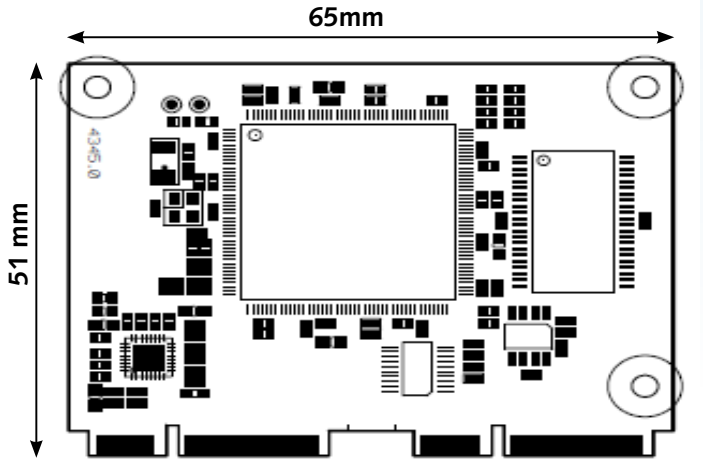
CANopen

Modbus

Specifications

Controller	STM32F407
Core	ARM 32-bit Cortex™-M4
Frequency (internal)	168MHz
Application memory	512kB for PLC user application
Interfaces	
Ethernet	1x 10/100Mbps, on-board PHY
CAN	2
UART	3
PWM	2
Analog Output	2
Analog Input	8
Digital Output	20
Digital Input	20
Fast Counter	2
Board-to-board connectors	2 x 52 pin card edge (Mini PCIe connector footprint)
Operating System	SmartPLC by infoteam
Programming Interface	RS 232, CAN, Ethernet
Programmable in	IEC 61131-3
Power Supply	3.3V +/-5%
Operating Temperature	-40°C … +85°C
Optional[1]	
LCD	DOT-matrix LCD (128 x 64, via SPI)
Mass storage	SD Card / eMMC on user board
RTC	Low current RTC via I2C with battery backup
Environmental standard	
RoHS	yes

The PLCcore-F407 provides broad I/O functionalities through simple connector footprint. Its used processor is a Cortex™ M4 - developed for efficient control and signal processing capabilities. User-applications written in IEC 61131-3 have access to CANopen and Modbus enabled devices. The modules provides a variety of pre-configured digital and analog inputs and outputs. For small motor control applications the PLCcore-F407 offers two PWM and two counter inputs. Support to CANopen and Modbus is included.



2x52 pin card edge connector (Mini PCIe connector footprint)

[1]Available under different item number, not all features available simultaneously

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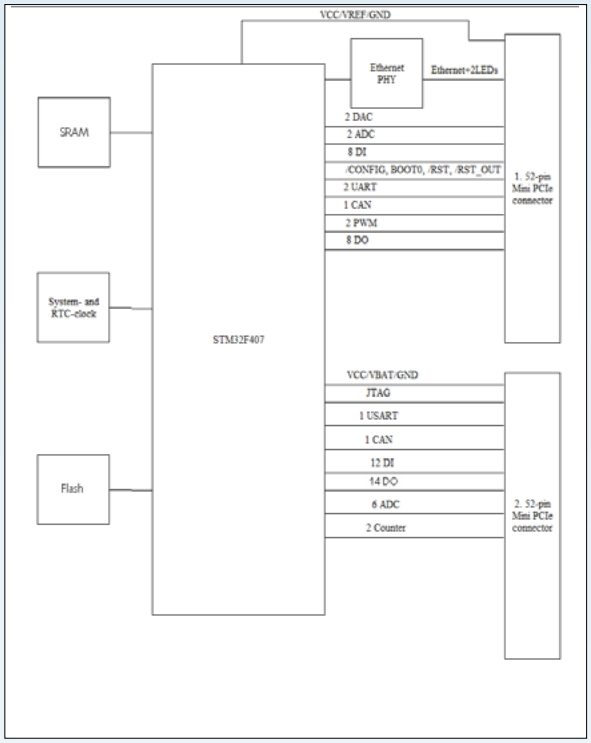
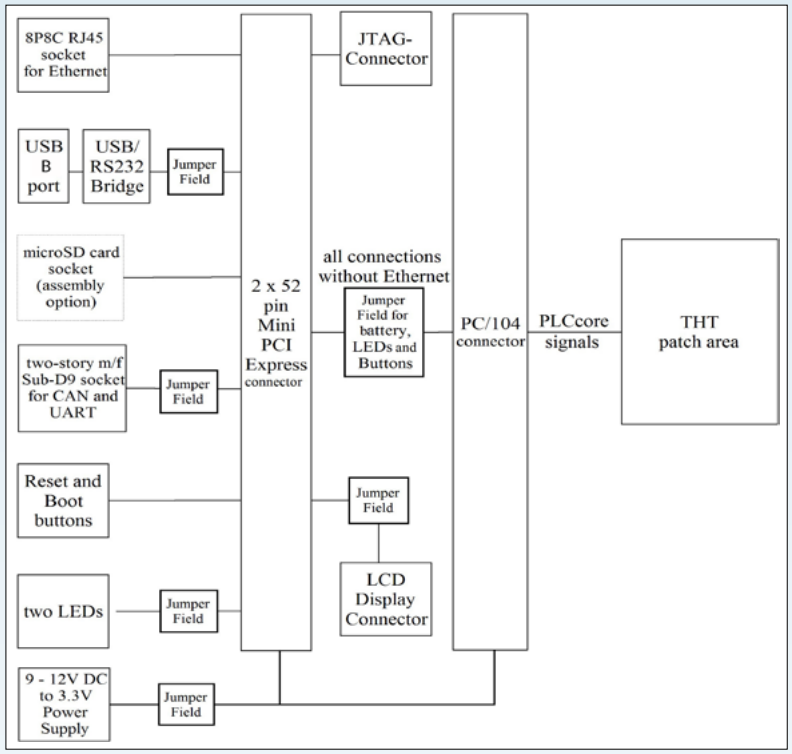
Core Module



Development Board



Production Package

The PLCcore-F407 is available as an insert-ready core module. Customers that would like to purchase in high volumes could also receive a product license with complete production documents and pre-programmed microcontrollers to produce PLCcore-F407 by themselves instead of buying, maximizing their flexibility and having additional cost optimization.

Design Packages

SYS TEC electronic offers design service packages on a fixed price basis. This includes designing and prototyping of customized application carrier boards for OEM. Customers will receive the design and production materials, so that they can reuse the design and produce by themselves. In this manner, it is possible to obtain considerably cost savings.

About SYS TEC electronic

SYS TEC electronic is a system house for customized electronic systems. Founded in 1990 in Germany, SYS TEC electronic has more than 25 years of experience providing a comprehensive service from consulting to OEM integration and series production or transfer of technology to our customers in the field of industry, transportation, communication, energy and computing.

Development Kit

includes: -Baseboard
-PLCcore-F407
-USB cable
-Software and documentation
-Baseboard schematics

Ordering Information

3390095	PLCcore-F407, ETH
3390094	PLCcore-F407, CAN
KIT-168	Development Kit PLCcore F407
SO-1113	Production Package PLCcore-F407

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