

Home › Software & Tools › Development Kits/Boards › SK-FM3-176PMC-FA Industrial Network Reference Design

SK-FM3-176PMC-FA Industrial Network Reference Design

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[To List for Evaluation Board](#)

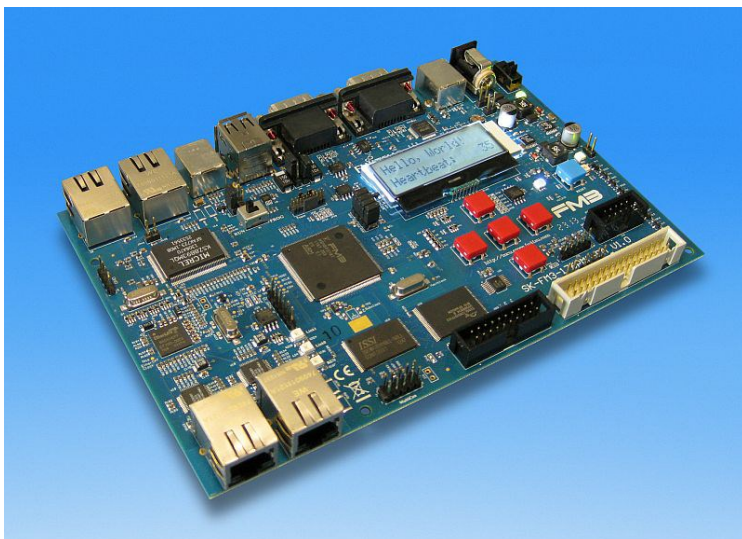
SK-FM3-176PMC-FA is a versatile evaluation board to develop industrial automation applications based on Cypress's FM3 microcontroller MB9BD10T Series. It was conceived especially as a reference platform to explore and develop Industrial Ethernet solutions but also CAN and USB. The board comes with a software package which includes various protocol stacks.

The hardware is suitable to support the following protocols:

- Modbus TCP
- POWERLINK
- EtherCAT
- Ethernet IP
- Profinet RT

FEATURES:

- FM3 Microcontroller MB9BFD18T
- 2x Ethernet via industrial switch/hub
- 2x EtherCAT via ASIC
- 2x High-speed CAN-Transceiver
- 2x USB-Host (Type-A connector)
- 1x USB-Device (Type-B connector)
- 1x USB-to-serial converter (Type-B connector)
- UART and OpenOCD JTAG simultaneously
- JTAG and Trace Interface
- Motor-Control-Interface
- Multicon (I²C, SPI, LIN, UART)
- LCD Display and RGB-LED
- 5x pushbutton (User buttons)
- Variable resistor
- Reset-button and Reset-LED
- 16MByte NOR flash memory
- 2MByte SRAM memory
- On-board 5V and 3V voltage regulators to supply MCU and on-board components
- RoHS compliant, CE conform



SK-FM3-176PMC-FA Industrial Network evaluation board

- Quick Start Guide
- Schematics
- Software example: Modbus TCP on FM3 (evaluation board SK-FM3-176PMC-FA)
- Application Note: MODBUS TCP on FM Family Microcontrollers
- Application Note: EtherCAT on FM Family Microcontrollers
- Software example to use evaluation board SK-FM3-176PMC-FA as an EtherCAT slave node
- A precompiled firmware to use evaluation board SK-FM3-176PMC-FA as an EtherCAT slave node
- The original firmware that evaluation board SK-FM3-176PMC-FA is shipped with
- Software example how to use all peripheral devices on evaluation board SK-FM3-176PMC-FA
- MB9BFxxx ethernet driver (Version 1.4 from 2014-07-15)

Support Software	
CMSIS-DAP USB drivers	CmsisDapDriverInstaller.zip (V1.4)
For the on-board JTAG adaptor "CMSIS-DAP" is a new firmware available fixing communication errors on high data transfers via UART. Please refer the readme_cmsisdap_firmwareupdate.pdf within the cmsis_fw_update.zip package how to update.	cmsisdap_fw_update.zip (V2.5)
Serial Port Viewer and Terminal	SerialPortViewerAndTerminalV57.zip

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