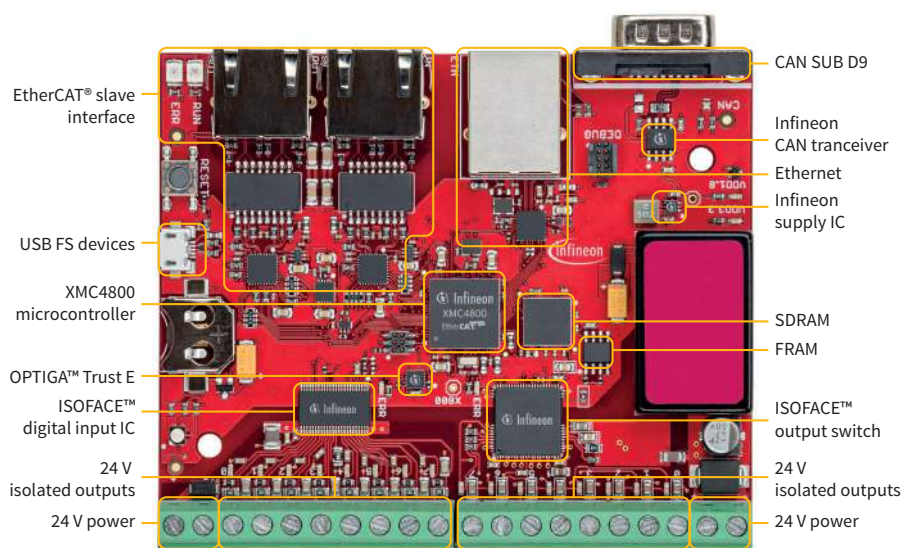Product Brief

XMC4800 Automation Board V2

Explore XMC4800 microcontroller based on ARM® Cortex®-M4

The XMC4800 Automation Board V2 utilizes Infineon's industry leading XMC ARM® Cortex®-M4 microcontroller in combination with Infineon supply, interface, communication and safety products. The XMC4800 Automation Board V2 is designed to evaluate the capabilities of the XMC4800 microcontroller especially in EtherCAT® slave applications and can be used with a wide range of development tools including Infineon's free of charge Eclipse based IDE, DAVE™.

PCB of the Automation Board V2

- EtherCAT® slave interface
- USB FS devices
- XMC4800 microcontroller
- OPTIGA™ Trust E
- ISOFACE™ digital input IC
- 24 V isolated outputs
- 24 V power
- CAN SUB D9
- Infineon CAN tranceiver
- Ethernet
- Infineon supply IC
- SDRAM
- FRAM
- ISOFACE™ output switch
- 24 V isolated outputs
- 24 V power

Key features

- › XMC4800-E196 MCU based on ARM® Cortex®-M4 at 144 MHz
- › EtherCAT® slave controller, 2 MB flash and 352 KB RAM
- › OPTIGA™ Trust E embedded security solution (CC EAL6+)
- › Real time clock crystal
- › SPI FRAM (64 kB non-volatile memory)
- › EtherCAT® slave node (2 EtherCAT® PHY and RJ45 Jacks)
- › 24 V ISOFACE™ 8-channel inputs and 8-channel outputs CAN transceiver
- › CAN transceiver

Key benefits

- › Complete Automation kit gateway
- › Combined MCU with EtherCAT slave application
- › Isolated interfaces w/ diagnose
- › Ethernet connectivity with software examples available
- › 24 V Supply
- › CAN connectivity
- › Full software DAVE™ examples

Key applications

- › Commercial, Construction and Agricultural Vehicles (CAV)
- › Building and automation
- › Industrial
- › Micro PLC
- › Motor control and drives

Automation   Home & building automation   Motor control   CAV

www.infineon.com/automationkit
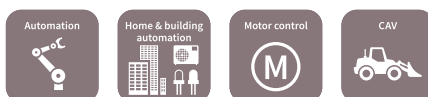
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Block diagram
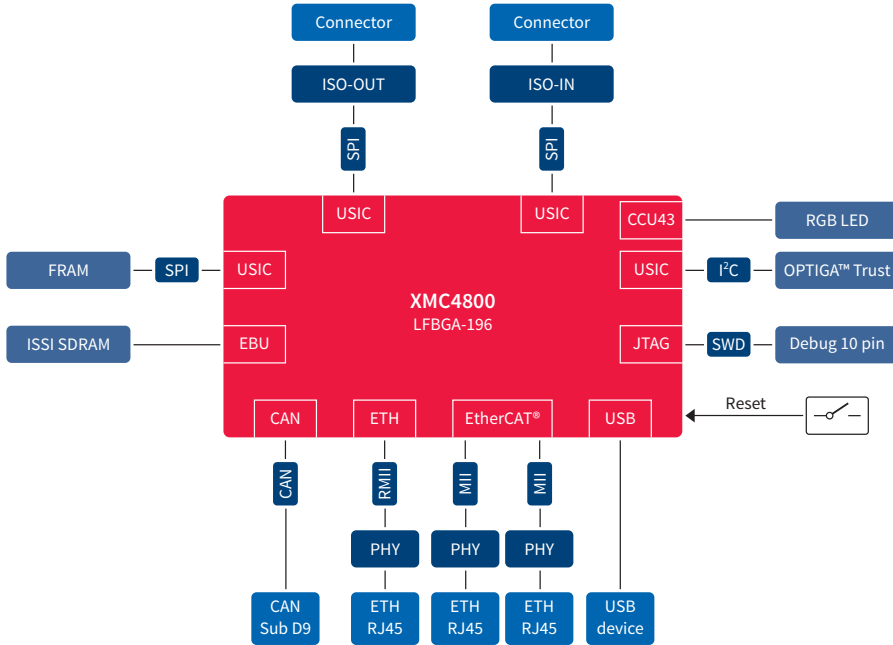
The block diagram shows the main components of the XMC4800 Automation Board V2 and their interconnections. The main building blocks are:

› XM4800 microcontroller in a LFBGA-196 package
› 2 EtherCAT® PHY with 2 RJ45 plugs
› 1 Ethernet PHY with RJ45 plug
› 24 V ISOFACE™ 8-channel inputs and 8-channel outputs
› RGB LED, CAN RG LED, reset push-button
› Micro-AB USB plug
› CAN transceiver with SUB 9 connector

Product table

Type	Description	Ordering code
KIT_XMC48_AUT_BASE_V2	The XMC4800 Automation Board V2 utilizes Infineon's industry leading XMC ARM® Cortex®-M4 microcontroller in combination with Infineon supply, interface/communication and safety products.	KITXMC48AUTBASEV2TOBO1
XMC4800-E196K2048	ARM® Cortex®-M4 microcontroller	XMC4800E196K2048AAXQMA1
ISO2H823V2.5	24 V 8-channel isolated output	ISO2H823V25XUMA1
ISO1I813T	24 V 8-channel isolated input	ISO1I813TXUMA1
SLS 32AIA020A4 USON10	OPTIGA™ Trust E – embedded security solution	SLS32AIA020A4USON10XTMA2
TLE6250GV33	Infineon CAN transceiver	TLE6250GV33XUMA1
IFX54441LDV	Infineon voltage regulator	IFX54441LDVXUMA1

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