

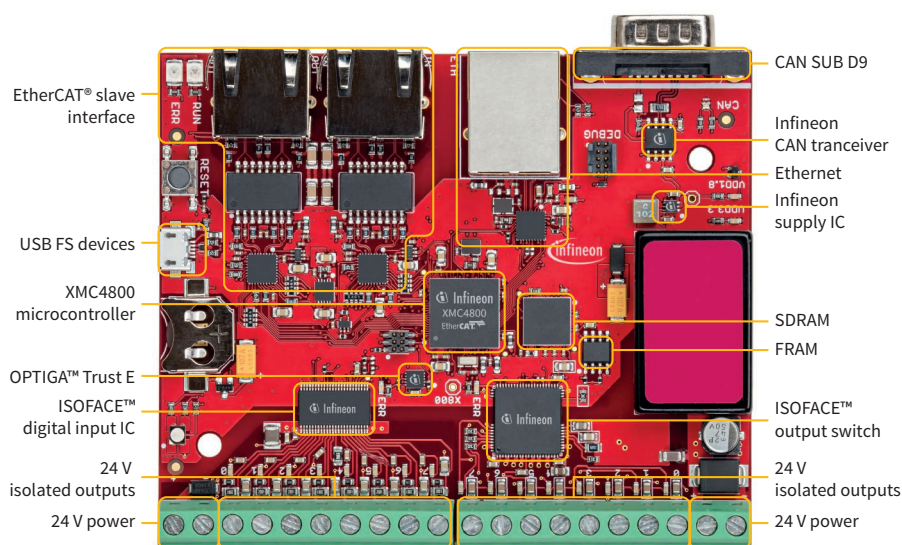
## Product Brief

# 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



### Key features

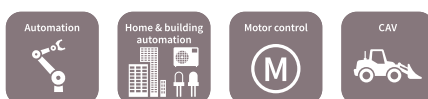
- > XMC4800-E196 MCU based on ARM® Cortex®-M4 at 144 MHz
- > EtherCAT® slave controller, 2 MB flash and 352 KB RAM
- > OPTIGA™ Trust E embedded security solution (CC EAL6+)
- > Real time clock crystal
- > SPI FRAM (64 kB non-volatile memory)
- > EtherCAT® slave node (2 EtherCAT® PHY and RJ45 Jacks)
-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

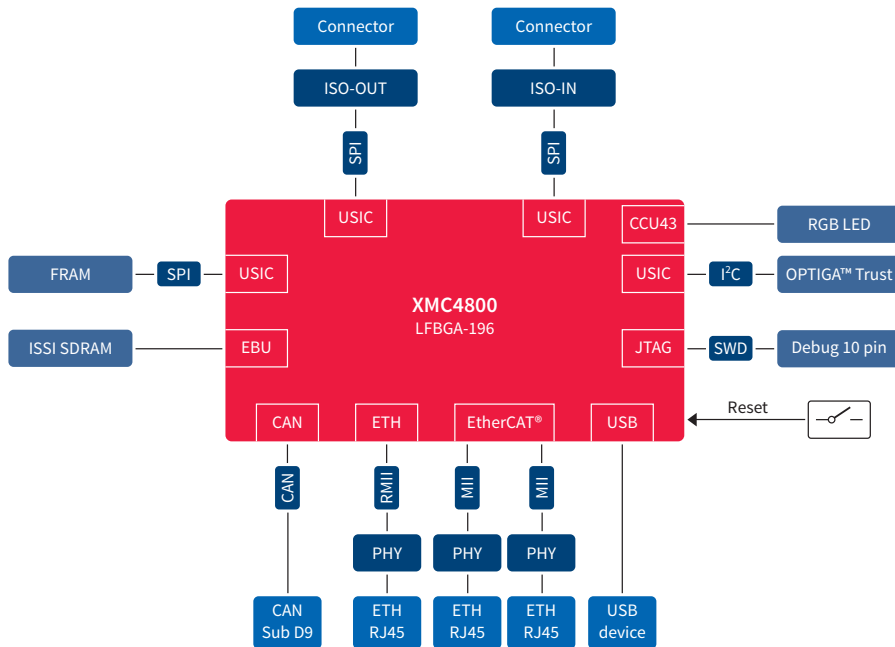
- > Commercial, Construction and Agricultural Vehicles (CAV)
- > Building and automation
- > Industrial
- > Micro PLC
- > Motor control and drives



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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:

- > XMC4800 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.	KITXMC48AUTBASEV2TOB01
XMC4800-E196K2048	ARM® Cortex®-M4 microcontroller	XMC4800E196K2048AAXQMA1
ISO2H823V2.5	24 V 8-channel isolated output	ISO2H823V25XUMA1
ISO1I813T	24 V 8-channel isolated input	ISO1I813TXUMA1
SLS32AIA020A4 USON10	OPTIGA™ Trust E – embedded security solution	SLS32AIA020A4USON10XTMA2
TLE6250GV33	Infineon CAN transceiver	TLE6250GV33XUMA1
IFX54441LDV	Infineon voltage regulator	IFX54441LDVXUMA1

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