



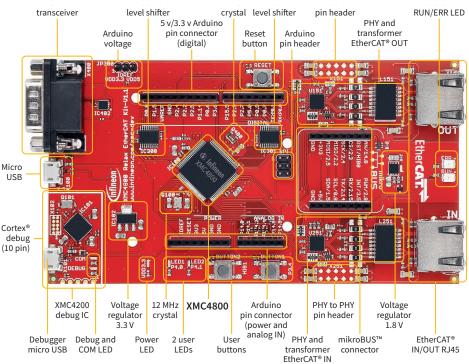
### **Product brief**

# XMC4800 IoT Amazon FreeRTOS connectivity kit WiFi

Explore XMC4800 microcontroller based on ARM® Cortex®-M4 in the IoT cloud

The XMC4800 IoT Amazon FreeRTOS connectivity kit with EtherCAT® utilizes Infineon's industry leading XMC ARM® Cortex®-M4 microcontroller in combination with WiFi Click-Board module from Mikrolectronica. The XMC4800 IoT Amazon FreeRTOS connectivity kit with EtherCAT® is designed to evaluate the capabilities of the XMC4800 microcontroller especially in IoT cloud application solutions, adding the EtherCAT® slave feautres and can be used with a wide range of development tools including Infineon's free of charge Eclipse based IDE, DAVE™, Amazon FreeRTOS and much more.





#### Key features

- > XMC4800-F100 MCU based on ARM® Cortex®-M4 at 144 MHz
- > EtherCAT® slave controller, 2 MB flash and 352 KB RAM
- > Mikroelectronica WiFi Click module included
- > EtherCAT® slave node (2 EtherCAT® PHY and RJ45 Jacks)
- > 24 V ISOFACE™ 8-ch inputs and 8-ch outputs CAN transceiver
- > CAN transceiver

#### Key benefits

- Full software support of AWS Amazon FreeRTOS
- Combined MCU with EtherCAT® slave application
- > Arduino compatibility
- > SEGGER debugger
- > mikroBUS™ ClickBoard interface
- > CAN connectivity
- > Full software DAVE™ examples

#### Key benefits

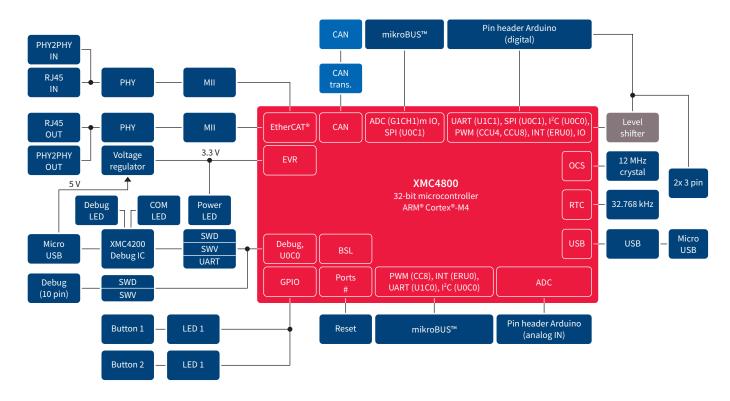
- > Cloud connected IoT devices
- > Building and automation
- > Industrial
- > Micro PLC
- Motor control and drives











The block diagram shows the main components of the XMC4800 IoT Amazon FreeRTOS connectivity kit WiFi and their interconnections.

#### The main building blocks are:

- > XM4800 microcontroller in a LQFP-100 pin package
- > 2 EtherCAT® PHY with 2 RJ45 plugs
- > 1 mikroBUS<sup>™</sup> connector
  (ClickBoard Mikroelectronica for WiFi connectivity)
- > Arduino connector
- > CAN transceiver with SUB 9 connector

#### Product table

Туре	Description	Ordering code
KIT_XMC48_IOT_AWS_WIFI	The XMC4800 IoT Amazon FreeRTOS connectivity kit with EtherCAT® utilizes Infineon's industry leading XMC ARM® Cortex®-M4 microcontroller in combination with Amazon FreeRTOS and Mikroelectronica ClickBoard for WiFi connectivity	KITXMC48IOTAWSWIFITOBO1
XMC4800-F100K2048	ARM ® Cortex ®-M4 microcontroller / LQFP-100 package / 2 MB flash / 352 KB RAM	XMC4800F100K2048AAXQMA1
IFX1117MEV33 SOT223	Infineon voltage regulator 3.3 V	IFX1117MEV33HTMA1
IFX54441LDV TSON-10	Infineon voltage regulator adj.	IFX54441LDVXUMA1
IFX1051LE TSON-8	Infineon CAN transceiver	IFX1051LEXUMA1

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