

About this document

Scope and purpose

Thank you for your interest in the KIT_XMC72_EVK XMC7200 evaluation kit. This document lists kit contents, installation requirements, kit documentation, limitations, and known issues.

Intended audience

This evaluation board is intended for all technical specialists who are familiar with connectivity and this board is intended to be used under laboratory conditions.



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Release contents

1 Release contents

1.1 Kit contents

The KIT_XMC72_EVK XMC7200 evaluation kit box includes the following:

- XMC7200 evaluation board
- USB Type-A to Micro-B cable
- 12 V/3 A DC power adapter with additional blades
- Six jumper wires (five inches each)
- Quick start guide



Tool information

2 Tool information

2.1 Software and tools

This kit's code examples require ModusToolbox™ software version 3.0 or later. This is available on the ModusToolbox™ software webpage. Refer to the kit guide for details.

KitProg3 firmware v2.40 or later is required to program the XMC7200D device on the kit. The ModusToolbox™ installer automatically installs KitProg3 drivers.

2.2 Code examples and kit collateral

The kit webpage includes the documents and hardware files. The code examples are available on the Infineon GitHub repository.

2.3 Installation

All required software installation instructions are provided in the kit guide, which is available on the kit webpage.

2.4 Kit revision

This is the initial version (Rev. **).

2.5 Limitations and known issues

The following are the limitations and the known issues in 'Rev**' revision of the KIT_XMC72_EVK. These will be resolved in future revisions of this EVK.

- Limitation: The KIT_XMC72_EVK with 1YN M.2 module currently does not support Bluetooth® functionality.
- Workaround: Not applicable.
- **Limitation:** KIT_XMC72_EVK with 1YN M.2 module does not support WLAN operation in low-power application.
- **Workaround:** On KIT_XMC72_EVK, the WL_HOST_WAKE pin of M.2 radio module is connected to P25_4 of the XMC7200 device, which does not support invoking an interrupt in Deep Sleep mode. To overcome this, a hardware rework needs to be done to connect WL_HOST_WAKE to an alternate pin, such as P12_7 that supports invoking interrupts in Deep Sleep mode. To achieve this, connect the pin J2.16 or J32.37 (P12_7) to J25.21 (WL_HOST_WAKE).
- **Issue:** The collector and emitter pins are swapped in the pass transistor (Q5) used in the core external regulatory circuit of the KIT XMC72 EVK.
- **Workaround**: This schematic error on the transistor does not impact the functionality of the code examples provided with the kit and works as expected.
- **Limitation:** HYPERFLASH™ interface with S26KL512SDABHI020 is tested up to 64 MHz and is limited because of the breakout interface between the XMC7200 evaluation board and the SMIF dual-header compatible with Digilent Pmod.

Workaround: Not applicable.

• **Limitation:** All the data and control signals interfaced from the XMC7200D device to the M.2 interface connector must be driven with the Strong Drive mode in the respective code example for active operation. This limitation is because of the voltage level shifters placed in between the XMC7200D device and the M.2 interface connector.



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- **Workaround:** SDHC initialization through the HAL API is automatically handled to Strong Drive mode configuration. If the module is initialized via the PDL API, you must configure the respective signals to Strong Drive mode.
- **Limitation:** XMC7200 evaluation kit hardware limits the ETM Trace debug operation to a maximum trace clock of 12.5 MHz. The kit has been validated for the trace clock up to 12.5 MHz using the IAR I-jet trace device.
- Workaround: Not applicable.
- **Limitation:** The pin P6[6] is connected to the VDDIO1 supply block because of which the potentiometer functionality is limited to work on the 3.3 V target voltage. When the VTARG voltage is set to 5 V, you will notice the voltage conflict on the POT_AOUT pin.
- **Workaround:** While working at 5 V target voltage, depopulate the jumper from the J18 header and series resistor R188 from connecting P6[6] GPIO to the potentiometer. Use an external reference voltage by connecting any ADC active GPIO from VDDD or VDDIO2 domain in the test firmware and the specific pin needs to be connected to POT_AOUT.

2.6 Documentation

The kit documents are available on the kit webpage.

Documents include:

- KIT_XMC72_EVK XMC7200 evaluation kit guide
- KIT_XMC72_EVK XMC7200 evaluation kit quick start guide
- KIT_XMC72_EVK XMC7200 evaluation kit release notes

2.7 Technical support

For assistance, go to www.infineon.com/support. Visit community.infineon.com to ask your questions in the Infineon developer community.

2.8 Additional information

- For more information about the XMC™ MCU, associated documentation, and software, visit www.infineon.com/cms/en/product/microcontroller/32-bit-industrial-microcontroller-based-on-arm-cortex-m
- For more information about ModusToolbox™ software functionality and releases, visit the ModusToolbox™ software webpage: www.infineon.com/cms/en/design-support/tools/sdk/modustoolbox-software
- For a list of training on ModusToolbox™ software, visit github.com/Infineon/training-modustoolbox

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