

# Quick start guide

# XMC7200 evaluation kit KIT\_XMC72\_EVK



#### **Kit contents**

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

www.infineon.com/KIT\_XMC72\_EVK

#### Before you start

- 1. Ensure that you have the following:
  - PC with USB port
  - UART terminal software such as Tera Term or Minicom
- 2. Visit the kit website to download and install the required software.

# Connect and power up the board

- 1. Ensure that jumper J10 is at position 2–3 to select 3.3 V.
- 2. Connect the power adapter provided with the kit to the board (J6).
- 3. Connect the KitProg3 USB connector (J7) to your PC.

# Connect the kit with the UART terminal software

- Open the UART terminal software and connect to the kit's USB-UART COM port with the following settings:
  - Baud rate: 115200, Data: 8 bit, Parity: None, Stop bit: 1 bit, Flow control: None
- 2. Press the XRES button (SW1) to reset the device.

#### Run the pre-programmed code example

- Observe the "Hello World!!!" message on the serial terminal and confirm that the three user LEDs blink one after the other.
- Press the Enter key to pause or resume blinking the user LED. Alternatively, use USER BTN1 or USER BTN2 to pause or resume the blinking.
- 3. Follow the instructions on the serial terminal to run other demos.

#### Next steps

Visit the kit website for information on code examples supported for this kit and kit documentation.

### USB cable connected to the KitProg3 USB connector



#### USB-UART COM port setup



# Serial terminal

\*\*\* KIT\_XMC72\_EVK - Running the out-of-the-box (OOB) demo project \*\* Enter an option from 1 - 7 to run the selected demo:

- 1. Hello world
- PWM square-wave output
  GPIO interrupt
- GPIO interrupt
  SAR ADC basics
- 5. XMC(TM) MCU power modes
- 6. QSPI memory read/write
- 7. CAN FD loopback

#### Note:

The demos on the serial terminal may differ because of continuous feature enhancements.

# XMC7200 evaluation board details



- 1 External power supply VIN connector (J6)
- 2 Power LED (LED5)
- 3 KitProg3 USB connector (J7)
- 4 KitProg3 status LED (LED4)
- 5 512-Mbit serial NOR flash memory (S25FL512S U9)
- 6 KitProg3 programming mode selection button (SW3)
- 7 VBAT power selection jumper (J8)
- 8 XMC7200D VTARG current measurement jumper (J15)
- 9 XMC7200D VDDIO2 current measurement jumper (J12)
- 10 System power (VTARG) selection jumper (J10)
- 11 XMC7200D 20-pin debug and trace header (J17)\*
- 12 XMC7200D 10-pin SWD/JTAG program and debug header (J16)
- 13 XMC7200D target I/O current measurement jumper (J14)
- 14 XMC7200D reset button (SW1)
- 15 Potentiometer (R105)
- 16 Potentiometer connection jumper (J18)
- 17 XMC7200D extended I/O headers (J29, J30, J31, J32)\*
- 18 M.2 I/O power selection jumper (J27)
- 19 Power header compatible with Arduino Uno R3 (J1)

- 20 Analog-IN header compatible with Arduino Uno R3 (J2)
- 21 SMIF dual header compatible with Digilent Pmod (J21, J22)\*
- 22 XMC7200D user buttons (SW2, SW4)
- 23 XMC7200D user LEDs (LED1, LED2, LED3)
- 24 M.2 stand-off (MT1)
- 25 M.2 interface connector (J25)
- 26 XMC7200D microcontroller (XMC7200D-E272K8384 U1)
- 27 VBAT current measurement jumper (J28)
- 28 RJ45 Gigabit Ethernet connector (J23)
- 29 Ethernet physical layer (PHY) transceiver (U22)
- 30 25-MHz crystal for Ethernet transceiver (Y3)
- 31 125-MHz crystal for Ethernet transceiver (Y4)\*\*
- 32 CAN FD resistor termination jumper (J20)
- 33 CAN FD interface connector (J19)
- 34 CAN FD transceiver (TLE9251VSJ U8)
- 35 Digital I/O headers compatible with Arduino Uno R3 (J3, J4)
- 36 KitProg3 programmer and debugger based on PSoC<sup>™</sup> 5LP (CY8C5868LTI-LP039 – U2)



See the kit guide available at the kit website for details.

Note: \*Not connected