

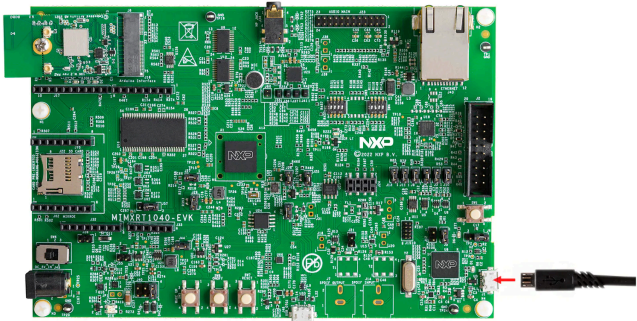
Catch our keynote at Computex: NXP CTO Lars Reger unveils our "Brighter Together" approach

ADD TO CALENDAR ([https://www.nxp.com/docs/en/supporting-information/NXP KEYNOTE AT COMPUTEX LARS REGER CTO - GLOBAL.ICS](https://www.nxp.com/docs/en/supporting-information/NXP_Keynote_at_Computex_Lars_Reger_CTO_-_Global.ics))

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/ i.MX RT1040-EVK

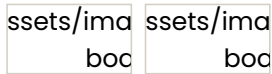
i.MX RT1040 Evaluation Kit

MIMXRT1040-EVK Receive alerts ⓘ



Roll over image to zoom in





i.MX RT evaluation boards provide a powerful, extendable platform for evaluation and prototyping using the MCUXpresso suite of software and tools. An Arduino UNO site is provided for expansion using NXP or 3rd party shield boards. The boards feature a high speed USB debug probe based with easy firmware update options to support CMSIS-DSP or a special version of J-link LITE from SEGGER.

Product Details

Supported Devices

Features

Applications

Supported Devices

Processors and Microcontrollers

- i.MX RT Crossover MCUs
- **i.MX-RT1040** (/products/processors-and-microcontrollers/arm-microcontrollers/i-mx-rt-crossover-mcus/i-mx-rt1040-crossover-mcu-with-arm-cortex-m7-core-operating-up-to-600-mhz-and- ⬆

extended-temperature-range:i.MX-RT1040): i.MX RT1040 Crossover MCU with Arm® Cortex®-M7 Core Operating Up to 600 MHz and Extended Temperature Range

Overview **Sensors** Product Details Documentation Design Resources ⓘ Training Support BUY OPTIONS GET STARTED (/DOCUMENT/GUIDE/GETTING-STARTED-WITH-THE-MIMXR1

Accelerometers

- **FXLS8974CF** (/products/sensors/accelerometers/2g-4g-8g-16g-low-power-12-bit-digital-iot-accelerometer:FXLS8974CF): ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer

Features

Audio

- WM8960 stereo audio codec
- 4-pole audio headphone + microphone jack
- External speaker connection points
- Microphone
- S/PDIF connector
- Audio expansion connector



(//www.nxp.com)
Board Memory

i.MX RT1040 Evaluation Kit

- 256 Mb SDRAM memory (Winbond W9825G6KH)
- 64 Mb QSPI Flash (Winbond W25Q64JVSSIQ)
- TF socket for SD card

Connectivity

- MURATA Type 1XK (/products/wireless/wi-fi-plus-bluetooth-plus-802-15-4/murata-nxp-iw416-shielded-ultra-small-dual-band-wi-fi-11a-b-g-n-plus-bluetooth-5-2-module:MURATA-1XK-MODULE) Ultra Small Dual band Wi-Fi 11a/b/g/n + Bluetooth 5.2 Module powered by NXP IW416
- Micro USB host and OTG connectors
- Ethernet (10/100 M) PHY and RJ45 connector
- CAN/CAN-FD transceiver (NXP TJA1057GT/3)

Debug Capabilities

- LPC-Link2 debug high speed USB probe with VCOM port



Expansion Connectors

- Arduino UNO R3 expansion header
- MikroE Click expansion header
- I²C expansion connector
- Audio expansion connector

Processor

- MIMXRT1042XJ M5B processor

Sensors

- NXP FXLS8974CF: ±2g/±4g/±8g/±16g, Low-Power 12-Bit Digital IoT Accelerometer

User Interface

- Parallel LCD display connector
- Wake up / User button

Less ^

Applications

Industrial

Motion Control and Robotics (/applications/industrial/aerospace/motion-control-and-robotics:MOTION-CONTROL-ROBOTICS)

Smart Lighting (/applications/smart-city/infrastructure/smart-lighting:SMART-LIGHTING-ASP)

Solar Photovoltaic (PV) Energy Generation (/applications/industrial/power-and-energy/solar-photovoltaic-pv-energy-generation:ELECTRICITY-GENERATION)

Smart Home

Home Control Panel (/applications/smart-home/smart-appliance/home-control-panel:HOME-CONTROL-PANEL)

