NXP FRDM-MCXC041 Development Board User Guide

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NXP FRDM-MCXC041 Development Board

Specifications

- **Product:** FRDM-MCXC041 Development Board
- **Manufacturer:** NXP
- **Features:** MCU-Link debugger, I/O access, Arduino headers, buttons, sensors, RGB LED, Pmod
- **Website:** www.nxp.com/FRDM-MCXC041

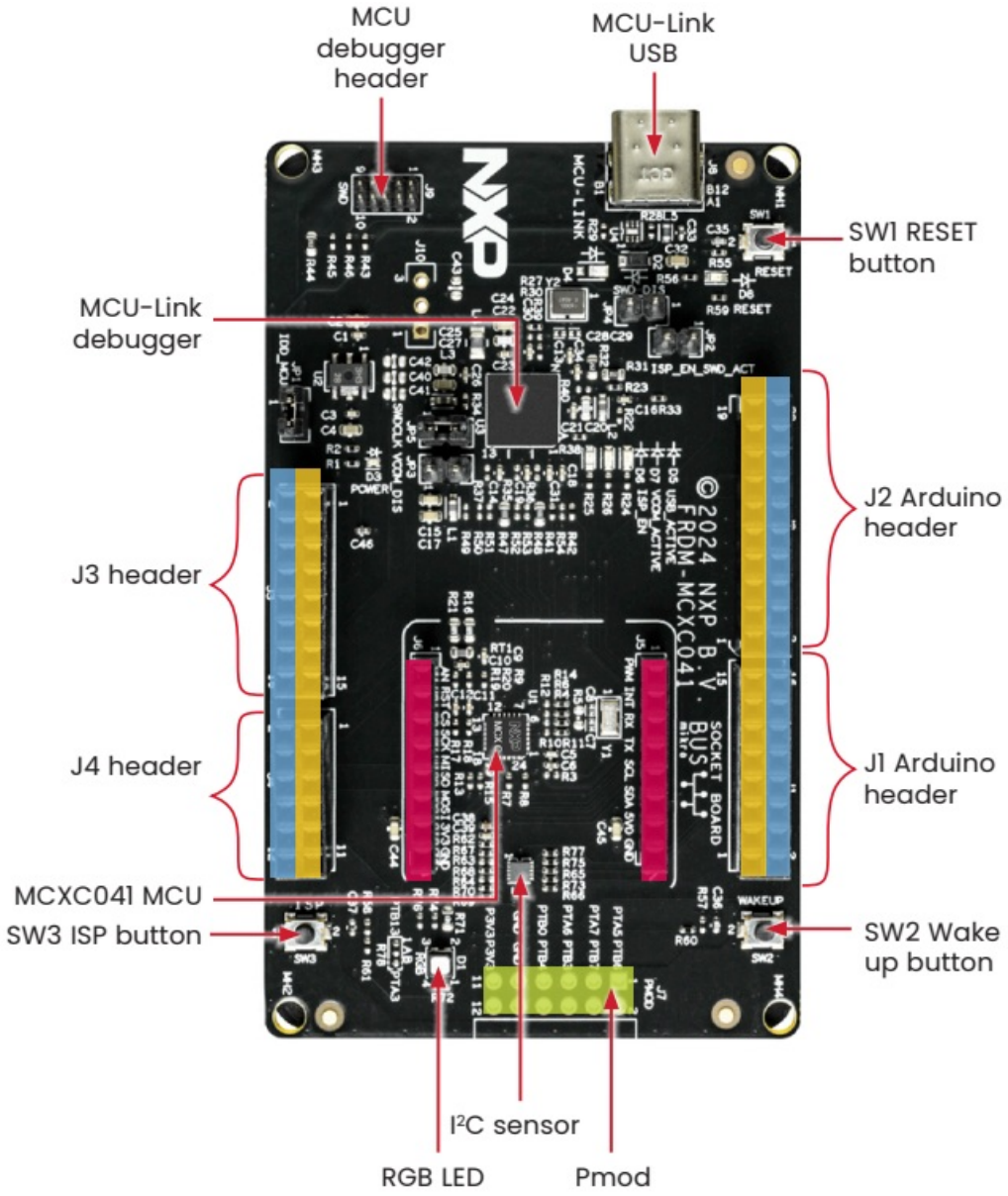
FAQs

- **Q: Is the FRDM-MCXC041 development board compatible with Arduino shields?**
  - **A:** Yes, the board features Arduino headers that allow for compatibility with Arduino shields.
- **Q: How can I access the I/O pins for prototyping?**
  - **A:** The board provides easy I/O access for connecting expansion boards and for fast prototyping.
- **Q: What is the purpose of the RGB LED on the board?**
  - **A:** The RGB LED can be used for visual indicators or status notifications in your projects.

Get to know

Get to know the FRDM-MCXC041 development board

- NXP’s MCUXpresso Developer Experience provides you with cost-effective MCU development boards.
- Easy I/O access supports expansion board use for fast prototyping and rapid evaluation.
- Enjoy your FRDM-MCXC041!



- Arduino® Header
- FRDM Header
- mikroBUS™
- Pmod™

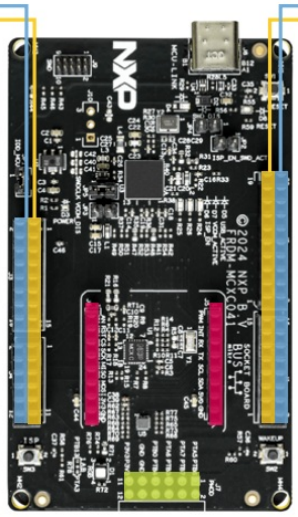
Quick Start Guide

Quick Start Guide FRDM-MCXC041

NC	NC	2	1	NC	NC
IOREF	P3V3	4	3	NC	NC
RESET	PTA1	6	5	NC	NC
3V3	P3V3	8	7	NC	NC
5V0	P5V0	10	9	NC	NC
GND	GND	12	11	NC	NC
GND	GND	14	13	NC	NC
VIN	P5-9V_VIN	16	15	NC	NC

A0	PTA9	2	1	NC	NC
A1	PTA8	4	3	NC	NC
A2	PTA12	6	5	NC	NC
A3	PTA2	8	7	NC	NC
A4	PTB13/PTA3	10	9	NC	NC
A5	PTA4	12	11	NC	NC

VCC	P3V3	12	11	P3V3	VCC
GND	GND	10	9	GND	GND
SDA	PTB4	8	7	PTB0	SCK
SCL	PTB3	6	5	PTA6	SDI
GPIO	PTB7	4	3	PTA7	SDO
GPIO	PTB6	2	1	PTA5	SS



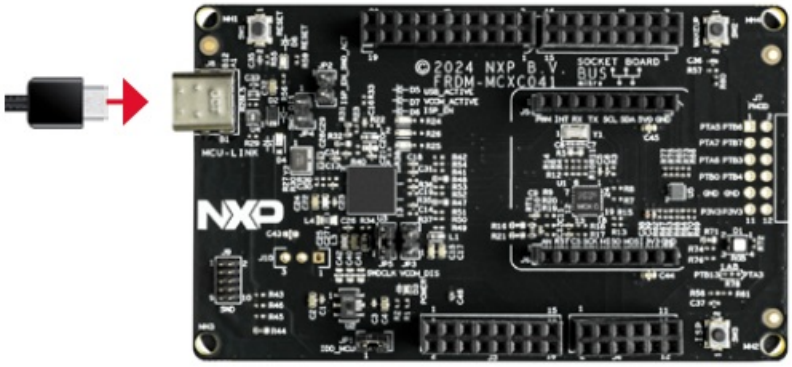
NC	NC	19	20	PTB3	D19/SCL
NC	NC	17	18	PTB4	D18/SDA
NC	NC	15	16	VDDA	AREF
NC	NC	13	14	GND	GND
NC	NC	11	12	PTB0	D13/SCK
NC	NC	9	10	PTA6	D12/SDI
NC	NC	7	8	PTA7	D11/PWM/SDO
NC	NC	5	6	PTA5	D10/PWM/SS
NC	NC	3	4	PTB11	D9/PWM
NC	NC	1	2	PTB10	D8

NC	NC	15	16	PTA0	D7
NC	NC	13	14	PTB5	D6/PWM
NC	NC	11	12	PTB7	D5/PWM
NC	NC	9	10	NC	D4
NC	NC	7	8	PTB6	D3/PWM
NC	NC	5	6	NC	D2
NC	NC	3	4	PTB1	D1/TX
NC	NC	1	2	PTB2	D0/RX

AN	PTA8	1	1	PTB13	PWM
RST	PTB10	2	2	PTB11	INT
CS	PTA5	3	3	PTB2	RX
SCK	PTB0	4	4	PTB1	TX
SDI	PTA6	5	5	PTB3	SCL
SDO	PTA7	6	6	PTB4	SDA
3V3	P3V3	7	7	P5V0	5V0
GND	GND	8	8	GND	GND

How to get started

Setup



1. Connect the FRDM-MCXC041 board to a PC using the USB Type-C® cable
2. The board comes preprogrammed with a blinky LED demo
3. Get started at nxp.com/FRDM-MCXC041/start Software and expansion boards
4. Use different headers to connect sensors, Arduino shields and more
5. Access software and tools through our MCUXpresso Developer Experience nxp.com/MCUXpresso
    - Expansion Board Hub mcuxpresso.nxp.com/eb-hub to find add-on boards from NXP and our partners with related MCUXpresso SDK-compatible drivers and examples
    - Application Code Hub mcuxpresso.nxp.com/appcodehub to browse application code examples from our experts to help kick start your project

Support

- **Visit** www.nxp.com/support.
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- **Agile Number:** 975-93442 REV A

Documents / Resources

	NXP FRDM-MCXC041 Development Board [pdf] User Guide MCX, MCX C, FRDM-MCXC041 Development Board, FRDM-MCXC041, Development Board, Board

References

- Application Code Hub
- NXP Expansion Board Hub
- Support | NXP Semiconductors
- User Manual

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