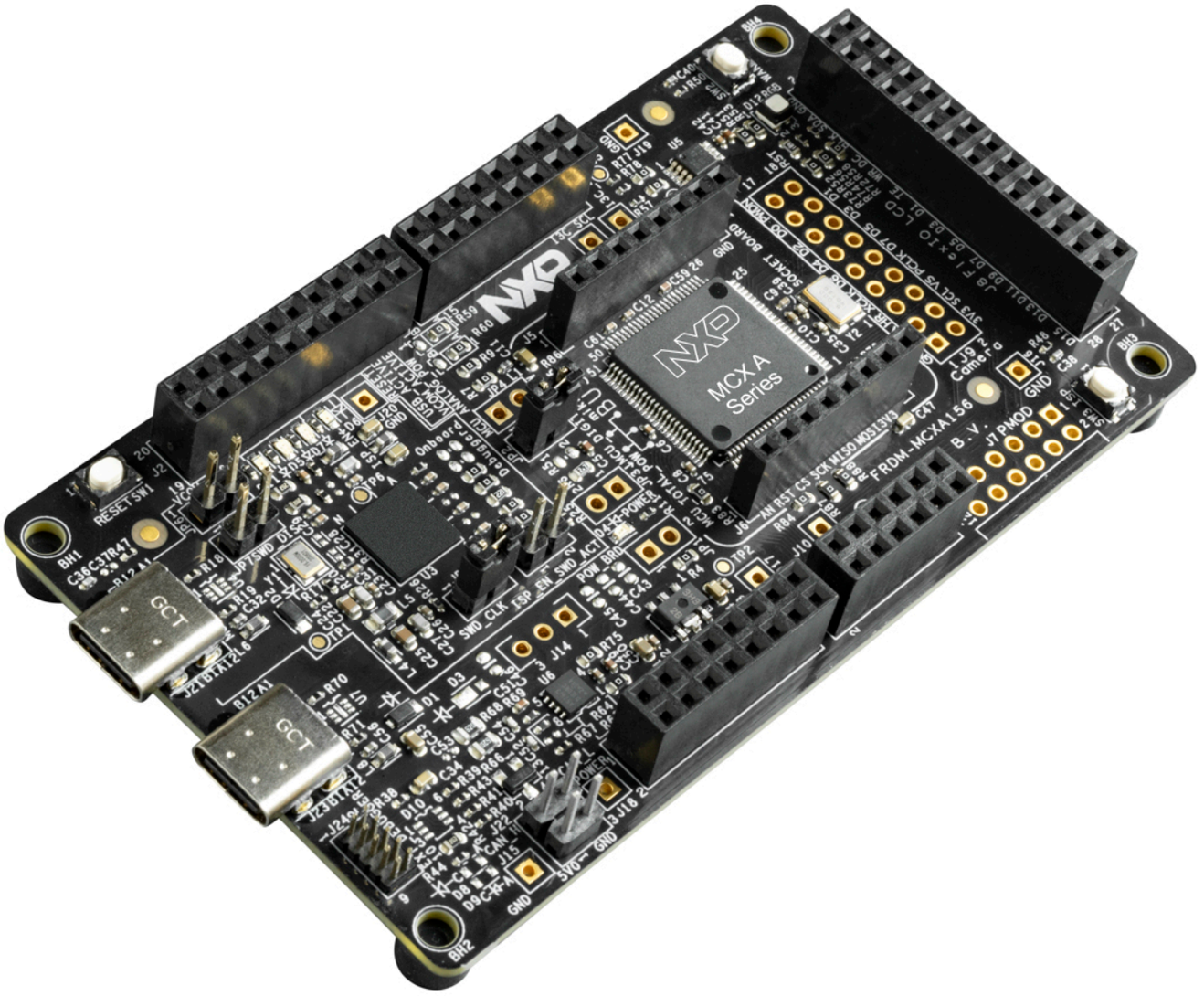
Quick Start Guide

MCUXpresso Developer Experience

FRDM-MCXA156 development board

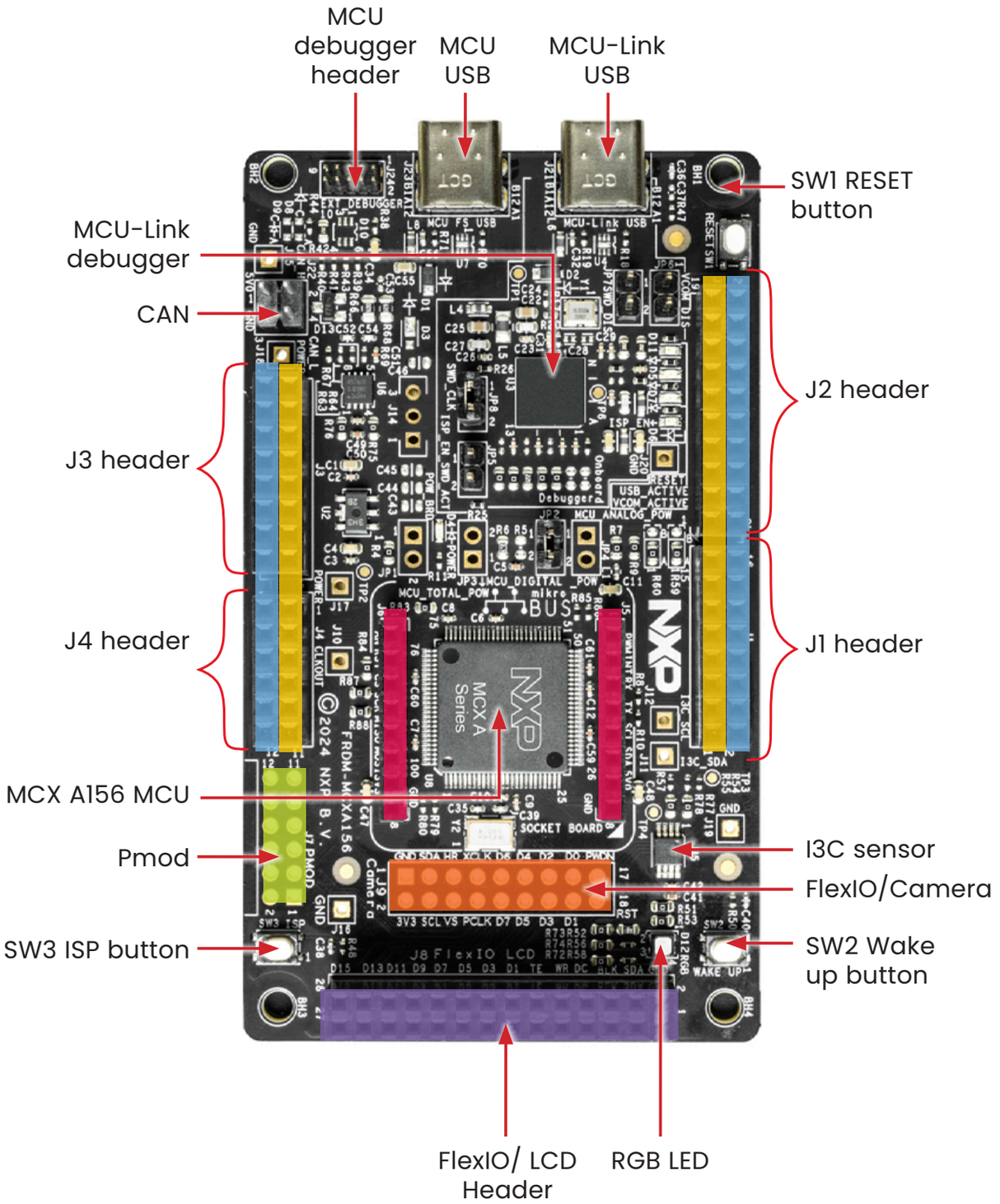


Get to know the FRDM-MCXA156 development board

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-MCXA156!



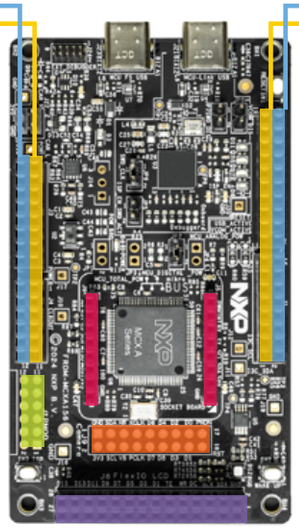
- Arduino® Header
- FRDM Header
- mikroBUS™
- Pmod™
- FlexIO/LCD Header
- FlexIO/Camera

Quick Start Guide FRDM-MCXA156

NC	NC	2	1	P2_7	MC1_ENC_B
IOREF	P3V3	4	3	P2_20	MC1_ENC_A
RESET	P1_29	6	5	P3_11	MC1_PWM_CB
3V3	P3V3	8	7	P3_10	MC1_PWM_CT
5V0	SYS_5V0	10	9	P3_9	MC1_PWM_BB
GND	GND	12	11	P3_8	MC1_PWM_BT
GND	GND	14	13	P3_7	MC1_PWM_AB
VIN	P5-9V_VIN	16	15	P3_6	MC1_PWM_AT

A0	P1_10	2	1	P4_6	MC2_ENC_A
A1	P2_5	4	3	P2_17	MC2_ENC_B
A2	P2_3	6	5	P3_31	MC2_ENC_I
A3	P2_4	8	7	NC	NC
A4	P1_12	10	9	NC	NC
A5	P1_13	12	11	NC	NC

VCC	P3V3	12	11	P3V3	VCC	Pmod
GND	GND	10	9	GND	GND	
SDA	P3_28	8	7	P1_1	SCK	
SCL	P3_27	6	5	P1_2	SDI	
GPIO	P3_20	4	3	P1_0	SDO	
GPIO	P3_19	2	1	P1_3	SS	



MC2_CUR_DCB	P1_10	19	20	P0_17	D19/SCL
MC2_VOLT_DCB	P2_3	17	18	P0_16	D18/SDA
MC2_BEMF_C	P2_6	15	16	VDDA	AREF
MC2_BEMF_B	P2_5	13	14	GND	GND
MC2_BEMF_A	P2_4	11	12	P2_12	D13/SCK
MC1_CUR_DCB	P2_2	9	10	P2_16	D12/SDI
MC1_VOLT_DCB	P2_1	7	8	P3_15	D11/PWM/SDO
MC1_BEMF_C	P2_16	5	6	P3_13	D10/PWM/SS
MC1_BEMF_B	P1_5	3	4	P3_17	D9/PWM
MC1_BEMF_A	P1_4	1	2	P1_15	D8

MC2_PWM_CT	P3_12	15	16	P1_14	D7
MC2_PWM_CB	P3_13	13	14	P3_16	D6/PWM
MC2_PWM_BT	P3_14	11	12	P3_14	D5/PWM
MC2_PWM_BB	P3_15	9	10	P3_31	D4
MC2_PWM_AT	P3_16	7	8	P3_12	D3/PWM
MC2_PWM_AB	P3_17	5	6	P3_1	D2
MC1_ENC_I	P1_6	3	4	P2_10	D1/TX
NC	NC	1	2	P2_11	D0/RX

mikroBUS	AN	P3_30	1	1	P3_18	PWM
	RST	P3_29	2	2	P3_19	INT
	CS	P1_3	3	3	P3_20	RX
	SCK	P1_1	4	4	P3_21	TX
	SDI	P1_2	5	5	P3_27	SCL
	SDO	P1_0	6	6	P3_28	SDA
	3V3	P3V3	7	7	SYS_5V0	5V0
	GND	GND	8	8	GND	GND

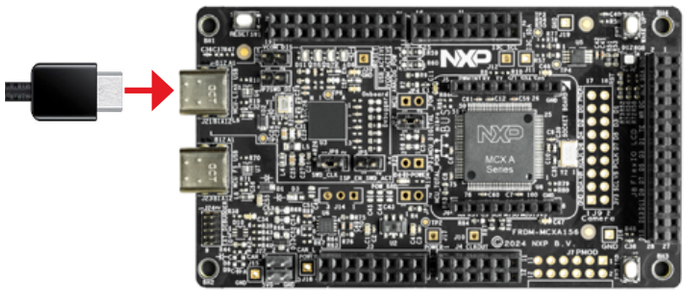
- Arduino® Header
- FRDM Header
- mikroBUS™
- Pmod™
- FlexIO/LCD Header
- FlexIO/Camera

FlexIO/Camera	GND	SDA	HREF	XCLK	D6	D4	D2	D0	PWDN
	GND	P1_8	P3_18	P3_6	P4_6	P4_4	P4_2	P2_0	P1_14
	1	3	5	7	9	11	13	15	17
	2	4	6	8	10	12	14	16	18
	P3V3	P1_9	P3_1	P3_21	P4_7	P4_5	P4_3	P2_1	P1_15
	3V3	SCL	VSYNC	PCLK	D7	D5	D3	D1	RESET

FlexIO/LCD	D15	D13	D11	D9	D7	D5	D3	D1	TE	WR	DC	BLK	SDA	GND
	P4_7	P4_5	P4_3	P2_1	P0_23	P0_21	P0_19	P0_17	P2_21	P2_23	P2_17	P3_22	P1_8	GND
	28	26	24	22	20	18	16	14	12	10	8	6	4	2
	27	25	23	21	19	17	15	13	11	9	7	5	3	1
	P4_6	P4_4	P4_2	P2_0	P0_22	P0_20	P0_18	P0_16	P2_20	P2_19	P3_0	P2_15	P1_9	P3V3
	D14	D12	D10	D8	D6	D4	D2	D0	RD	CS	RST	INT	SCL	3V3

How to get started

Setup



1. Connect the FRDM-MCXA156 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-MCXA156/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

www.nxp.com/FRDM-MCXA156

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