i.MX 91 Evaluation Kit

i.MX91EVK

Active

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The i.MX 91 EVK provides a platform for comprehensive evaluation of the i.MX 91 applications processors and also includes the ability to measure power consumption on the power rails.
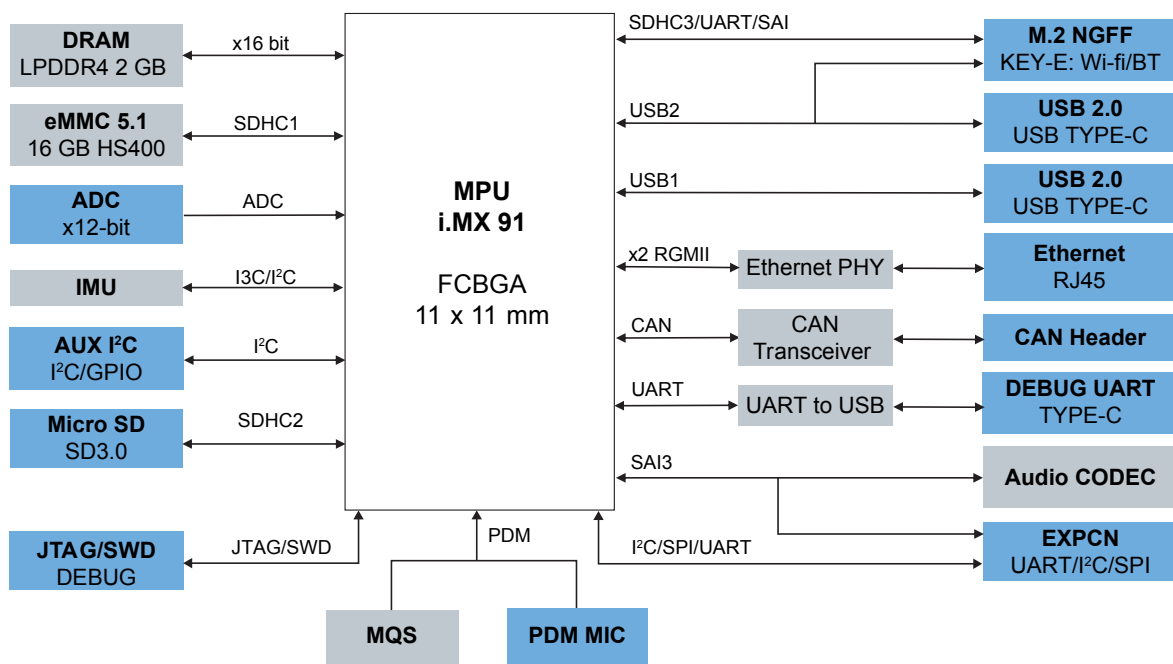
The kit includes two interconnected boards:

A compute module (standard 6-layer technology) containing a superset i.MX 91 SoC, 2 GB LPDDR4, 16 GB eMMC, NXP's PMIC (PCA9451A) and power monitoring circuits.

A connectivity base board, which includes a standard M.2 KEY-E slot for plugging in off-the-shelf connectivity modules, such as Wi-Fi/Bluetooth modules from NXP partners.

The Linux-based board support package software is preloaded to boot from the compute module eMMC memory. This includes a rich GoPoint application to explore preinstalled demos. This kit provides an excellent starting point to accelerate your own design.

i.MX91-LPD4 EVK Block Diagram

On-board component	Connection	MPU	Connection	Peripheral
DRAM LPDDR4 2 GB	x16 bit		SDHC3/UART/SAI	**M.2 NGFF** KEY-E: Wi-fi/BT
eMMC 5.1 16 GB HS400	SDHC1		USB2	**USB 2.0** USB TYPE-C
ADC x12-bit	ADC	**MPU i.MX 91** FCBGA 11 x 11 mm	USB1	**USB 2.0** USB TYPE-C
IMU	I3C/I²C		x2 RGMII → Ethernet PHY	**Ethernet** RJ45
AUX I²C I²C/GPIO	I²C		CAN → CAN Transceiver	**CAN Header**
Micro SD SD3.0	SDHC2		UART → UART to USB	**DEBUG UART** TYPE-C
			SAI3	**Audio CODEC**
JTAG/SWD DEBUG	JTAG/SWD		I²C/SPI/UART	**EXPCN** UART/I²C/SPI

MQS — PDM — PDM MIC

On-board components | Headers and Connectors

View additional information for i.MX 91 Evaluation Kit.