

PICO-IMX6UL-EMMC



Main Features

- Expanding the PICO series, the PICO-IMX6UL-EMMC is a high performance, ultra-efficient SoM featuring NXP i.MX6 UL/ULL application processor, an advanced implementation of a single ARM Cortex-A7 core.
- Pin-compatible with the Intel Edison for sensors and low-speed I/O, but also adds additional expansion possibilities for multimedia and connectivity, that can easily be expanded and implemented for IoT designs.
- WiFi and Bluetooth communication interface.



yocto
PROJECT



	EDISON				EXP-A		EXP-B			
Power	SDIO	I ² S	SPI	PWM	LVDS	RMII	CAN	PCIe	HDMI	SATA
	USB OTG	UART	I ² C	GPIO	TTL		I ² C	USB HOST	MIPI	

Specifications

Core System

Processor	NXP i.MX6 UltraLite NXP i.MX6 ULL
Architecture	ARM Cortex-A7
PMIC	NXP PF3000
Memory	up to 1GB DDR3L
Storage	eMMC (4GB Default)
Board-to-Board Connector	Edison compatible connector PICO 70-pin Hirose connectors
System on Module	PICO SOM

Connectivity

Network LAN	RMII
WiFi/Bluetooth	Qualcomm QCA6174(optional) 802.11 a/b/g/n/ac + BT 4.1 (BR+EDR+BLE)
	Qualcomm QCA9377(optional) 802.11 a/b/g/n/ac + BT 4.1 (BR+EDR+BLE)
Antenna	MHF4 connector (optional)

Signaling

I/O	RGB TTL	UART
	RMII	SPI
	USB	I ² C
	USB OTG	PWM
	I ² S	GPIO
	CAN	

Video

Graphic Engine	Image re-sizing / rotation / overlay and CSC Pixel Processing Pipeline
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Audio

Audio Codec	On carrier board
Audio Interface	I ² S (1 channel)

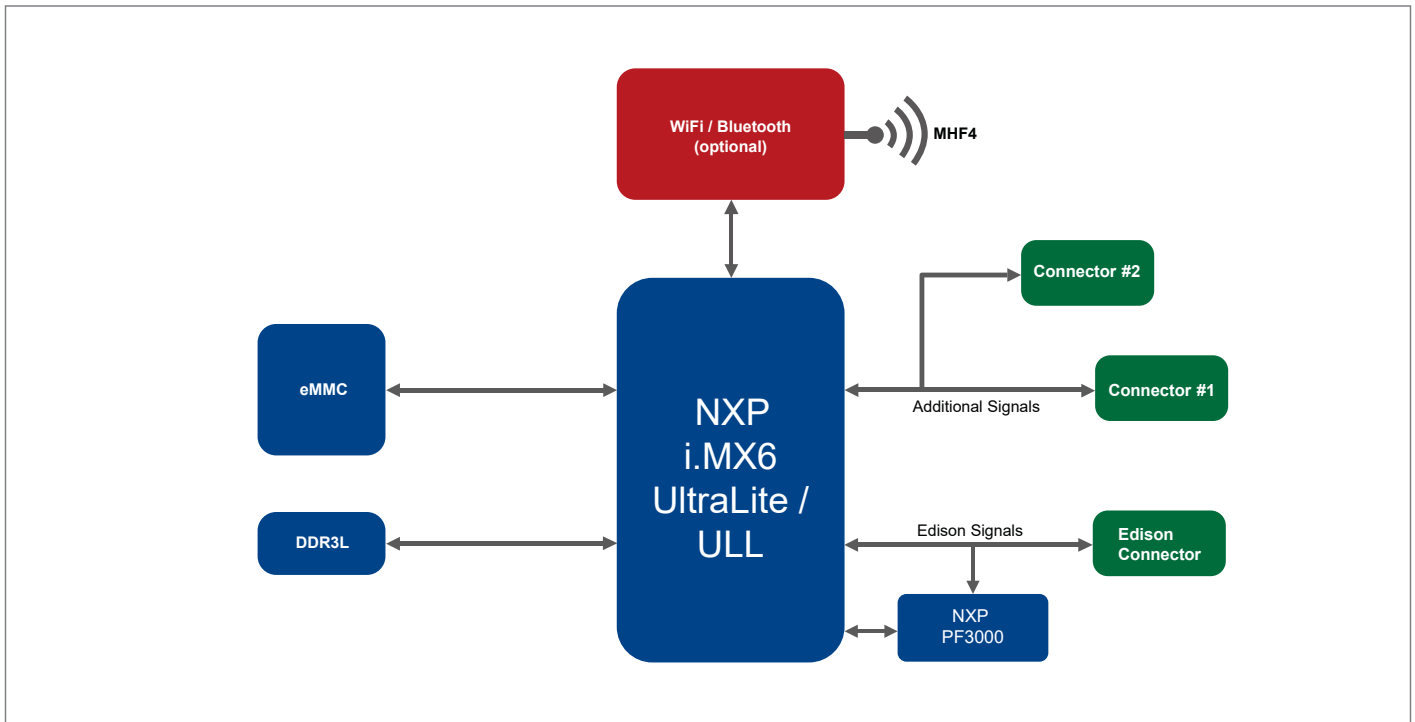
Power Specifications

Power Input	4.2-5.25V DC
Power Consumption	Depending on Configuration

Operation Systems

Standard Support	Linux Yocto Ubuntu
Extended Support	Commercial Linux

Block Diagram

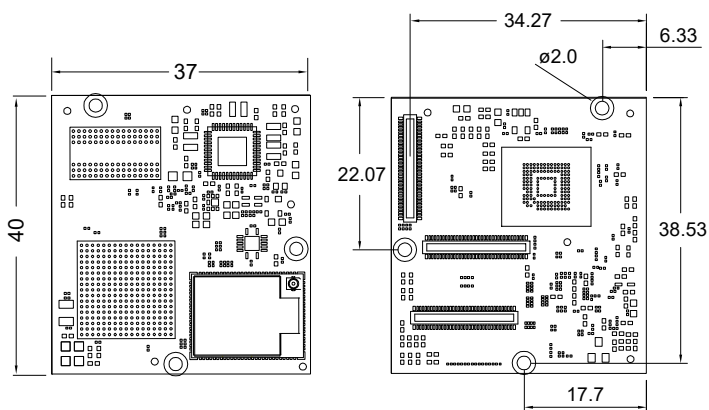


Environmental and Mechanical

Dimensions	37 x 40 mm / 1 $\frac{3}{8}$ x 1 $\frac{5}{8}$ inch
Form Factor	PICO Compute Module
Weight	8 grams
Temperature	Commercial: 0° to +60° C Extended: -20° to +70° C Industrial: -40° to +85° C
Relative Humidity	10 to 90 %
MTBF	>100 000 Hours
Shock	50G/25ms
Vibration	20G/0-600Hz
Certification	Compliant with CE / FCC / RoHS / REACH directives

Dimensions

(units in mm)



Ordering Information

PICO-IMX6xx-xx-Rxx-Exx-xxxx-xx-xxxx

	Code	Description
Processor	IMX6G2	NXP i.MX6UltraLite
	IMX6Y2	NXP i.MX6ULL
Processor speed	05	528MHz
	09	900MHz
Memory	R02	256MB DDR3L
	R05	512MB DDR3L
	R10	1GB DDR3L
Storage	E04	eMMC 4GB
	E08	eMMC 8GB
	EXX	eMMC other capacity
WiFi / Bluetooth	-	-
	6174	Qualcomm QCA6174 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth 4.1
	9377	Qualcomm QCA9377 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth 4.1
Temperature Range	-	Commercial Temperature range (0° to +60° C)(Default)
	TE	Extended Temperature range (-20° to +70° C)
	TI	Industrial Temperature range (-40° to +85° C)
Custom ID	XXXX	Custom Part number ID for customized software loader and special component (BOM)

* Feel free to contact us for custom tailored Carrier Board request for your projects.