

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 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.



	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 UL
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	Broadcom BCM43438 (optional) 802.11 b/g/n + BT 4.1 (BR+EDR+BLE)
	Broadcom BCM4339 (optional) 802.11 a/b/g/n/ac + BT4.1 (BR+EDR+BLE)
Antenna	u.FL 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
----------------	--

Audio

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

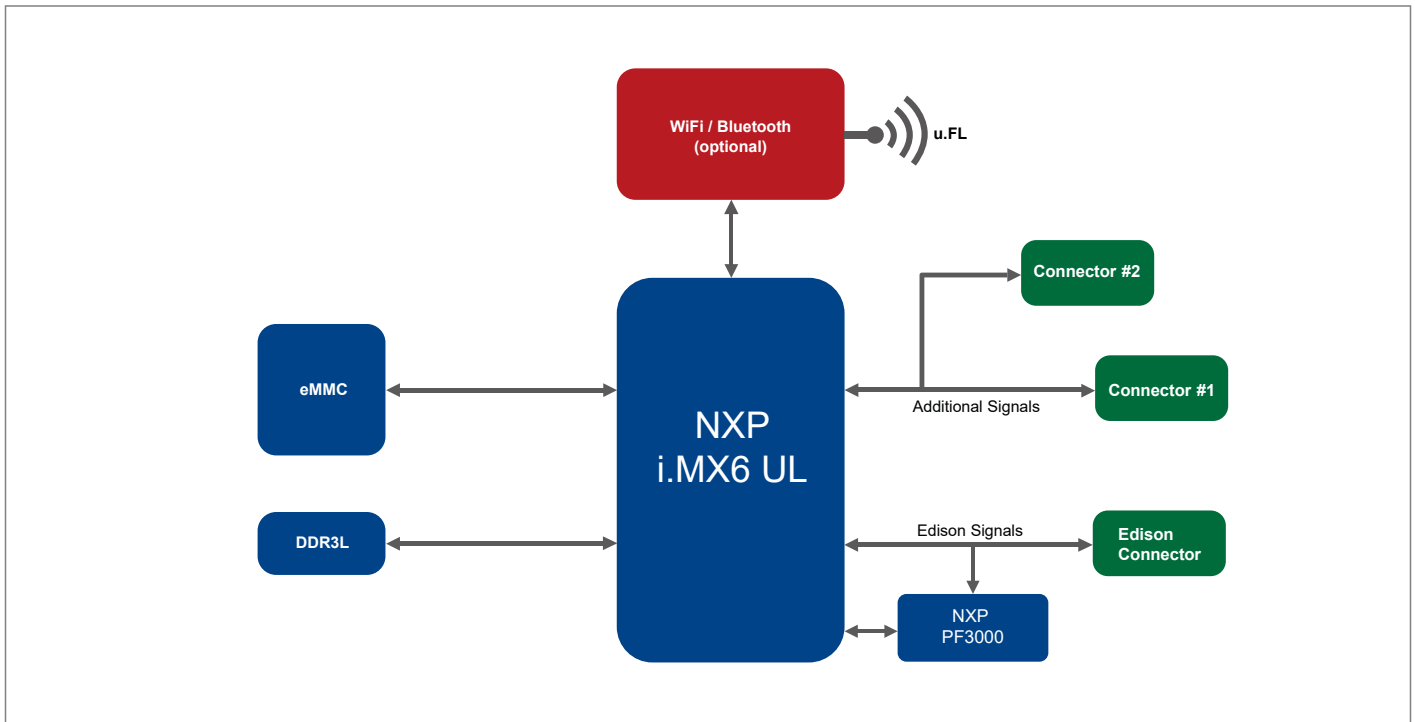
Power Specifications

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

Operation Systems

Standard Support	Android Things Linux Yocto Ubuntu
Extended Support	Commercial Linux

Block Diagram

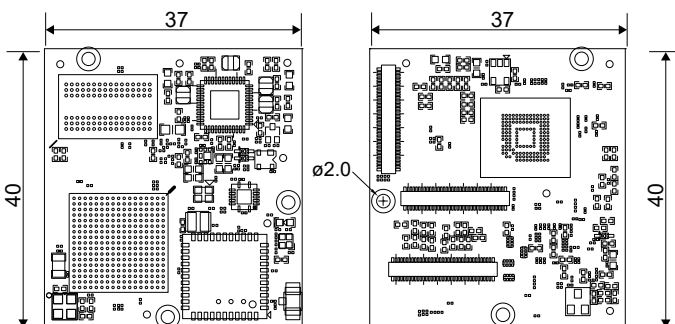


Environmental and Mechanical

Dimensions	37 x 40 mm / 1 5/8 x 1 5/8 inch
Form Factor	PICO Compute Module
Weight	8 grams
Temperature	Commercial: 0° to +60° C Extended: -20° to +70° C Industrial: -35° to +85° C (no WiFi)
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-IMX6G2-05-Rxxx-Exx-xx-xx-xxxx

	Code	Description
Processor	G2	NXP i.MX6UltraLite
Processor speed	05	528MHz
Memory	R256	256MB DDR3L
	R512	512MB DDR3L
	R1GB	1GB DDR3L
Storage	E04	eMMC capacity in Gigabyte E04 = 4GB / E08 = 8GB / E16 = 16GB / E32 = 32GB / E64 = 64GB
Bluetooth / WiFi	-	-
	BB	Broadcom BCM43438 802.11b/g/n (2.4GHz) + Bluetooth 4.1
	BW	Broadcom BCM4339 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 (-35° 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.