

PICO-IMX6



Main Features

- The PICO-IMX6 reference design based on the NXP i.MX6 multimedia processor is a feature and performance scalable hardware platform equipped with a wide array of high-speed connectivity.
- The PICO-IMX6 combines outstanding detailed documentation and design files to integrate the module into your designs at predictable scaling costs.
- Engineered to support various industrial and consumer IoT end-devices.



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

Specifications

Core System

Processor	NXP i.MX6 Solo NXP i.MX6 DualLite NXP i.MX6 Quad
Architecture	ARM Cortex-A9
Memory Storage	up to 2GB DDR3 eMMC (4GB Default) MicroSD Cardslot (optional)
Board-to-Board Connector	Edison compatible connector PICO 70-pin Hirose connectors
System on Module	PICO System on Module

Connectivity

Network LAN	RGMII
Wi-Fi/Bluetooth	Qualcomm QCA9377(optional) 802.11 a/b/g/n/ac + BT 5 (BR+EDR+BLE)
Antenna	MHF4 connector (optional)

Signaling

I/O	HDMI	SATA
	LVDS (Single Channel)	SDIO
	RGB TTL	CAN
	MIPI CSI	UART
	MIPI DSI	SPI
	RGMII	I ² C
	PCIe	GPMC
	USB	PWM
	USB OTG	GPIO
	I ² S	

Video

Graphic Engine	Vivante GC320 (2D Composition) Vivante GC355 (Quad) Vivante GC880 (Solo/DualLite) Vivante GC2000 (Quad)
Video Decode	1080p30 + D1 (Solo/DualLite) 1080p60 H.264 (Quad)
Video Encode	1080p30 H.264 BP/Dual 720p
Camera	MIPI CSI (4 lanes)

Audio

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

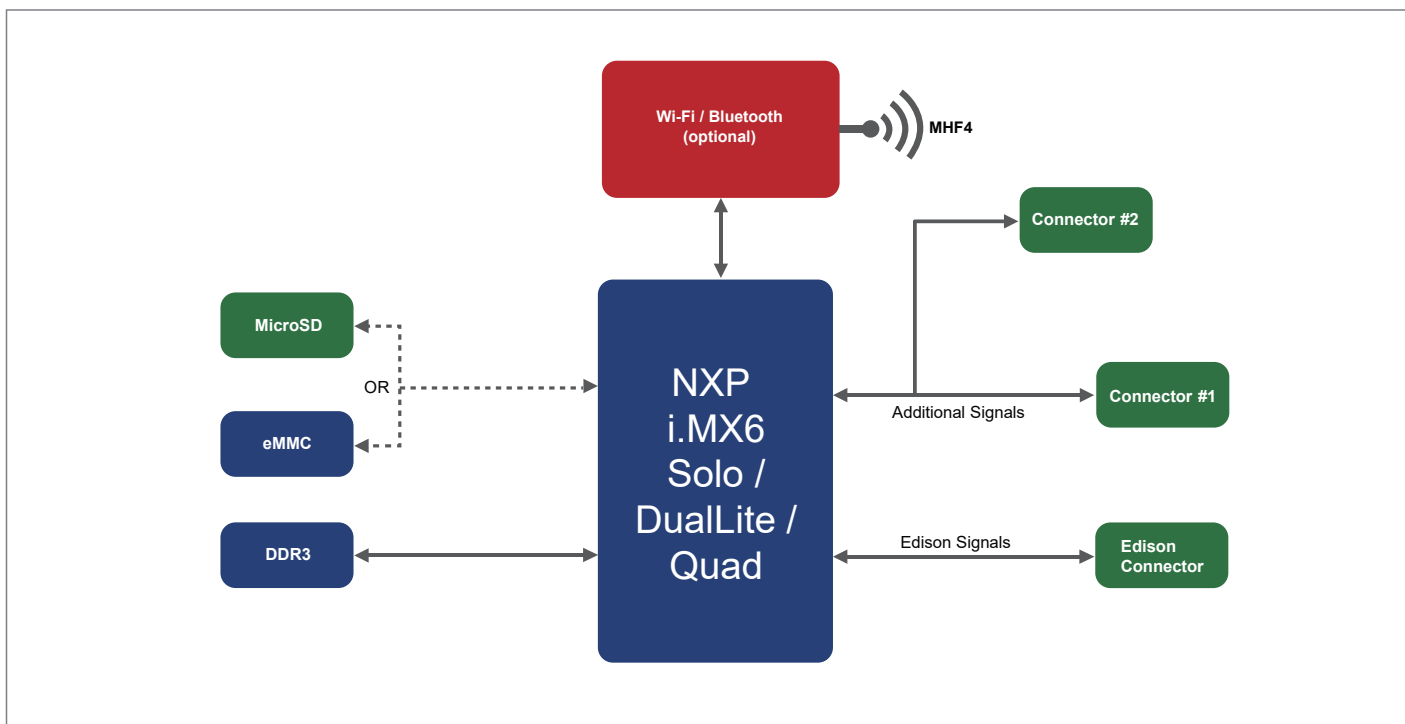
Power Specifications

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

Operation Systems

Standard Support	Linux Yocto Ubuntu Android
Extended Support	Commercial Linux

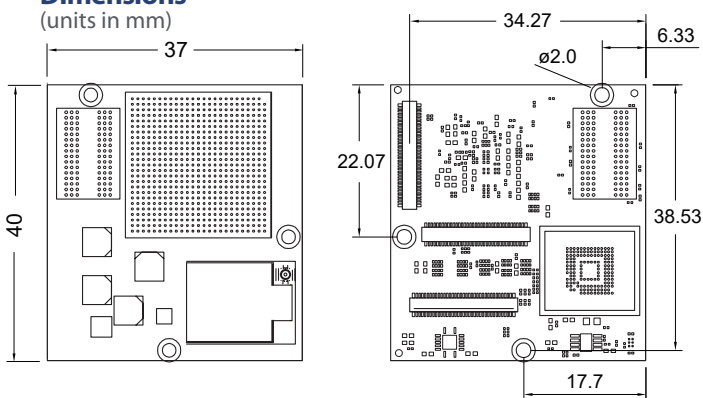
Block Diagram



Environmental and Mechanical

Dimensions	37 x 40 mm / 1 3/8 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: -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-IMX6x-xx-Rxx-xxx-xxxx-xx-xxxx

	Code	Description
Processor	IMX6S	NXP i.IM6Solo
	IMX6U	NXP i.MX6DualLite
	IMX6Q	NXP i.MX6Quad
Processor Speed	08	800MHz
	10	1GHz(Default)
Memory	R05	512 MB DDR3
	R10	1GB DDR3
	R20	2GB DDR3
Storage	MSD	MicroSD Cardslot
	E04	eMMC 4GB
	E08	eMMC 8GB
	EXX	eMMC other capacity
Wi-Fi / Bluetooth	-	-
	9377	Qualcomm QCA9377 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth 5
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 customization requests.