

# PICO-IMX6POP



## Main Features

- The PICO-IMX6POP reference design based on the NXP i.MX6 Package-on-Package (PoP) multimedia processor together with the NXP MMPF0100 PMIC is a purpose-built, small footprint hardware platform equipped with a wide array of high-speed connectivity.
- The PICO-IMX6POP combines outstanding detailed documentation and design files to integrate the module into your designs to facilitate fast prototyping and time to market at predictable scaling costs.
- Engineered to support various industrial and consumer IoT end-devices.



### EDISON

Power	SDIO	I <sup>2</sup> S	SPI	PWM
	USB OTG	UART	I <sup>2</sup> C	GPIO

### EXP-A

LVDS	RGMII
TTL	

### EXP-B

CAN	PCIe	HDMI	SATA
I <sup>2</sup> C	USB HOST	MIPI	

## Specifications

### Core System

Processor	NXP i.MX6 Dual (PoP) NXP i.MX6 Quad (PoP)
Architecture	ARM Cortex-A9
PMIC	NXP MMPF0100
Memory	up to 2GB LPDDR2
Storage	eMMC (4GB Default) MicroSD Cardslot (optional)
Board-to-Board Connector	Edison compatible connector PICO 70-pin Hirose connectors PICO System on Module

### Connectivity

Network LAN	RGMII
WiFi/Bluetooth	Broadcom BCM4339 (optional) 802.11 a/b/g/n/ac + BT4.1 (BR+EDR+BLE)
Antenna	u.FL connector (optional)

### Signaling

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

### Video

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

### Audio

Audio Codec	On carrier board
Audio Interface	I <sup>2</sup> S (1 channel)

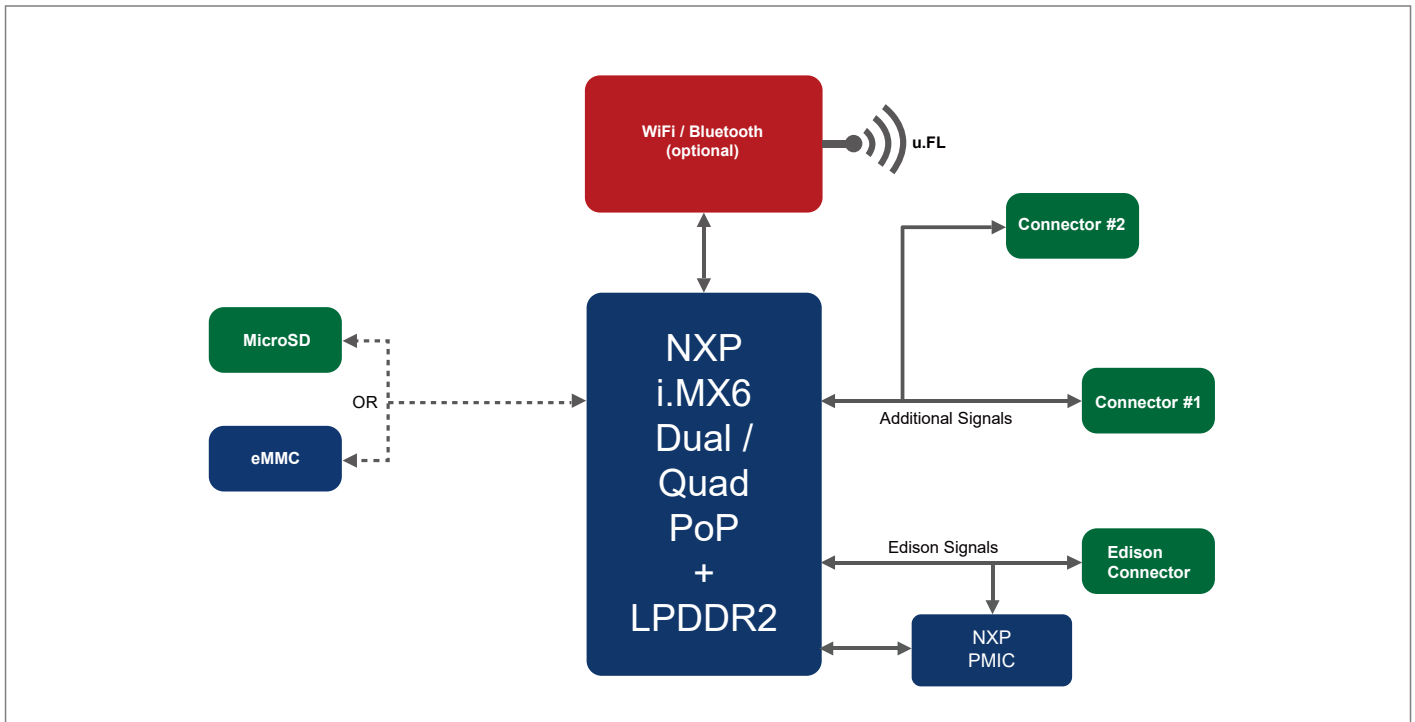
### Power Specifications

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

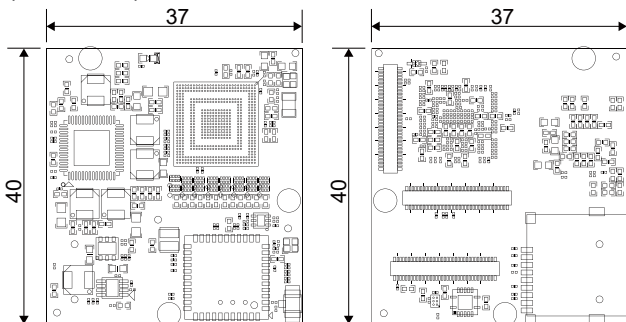


### Environmental and Mechanical

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
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-IMX6**XXXX-Rxx-xxx-xx-XXXX**

	Code	Description
Processor	DPOP	i.MX6Dual PoP
	QPOP	i.MX6Quad PoP
Memory	R10	1GB LPDDR2
	R20	2GB LPDDR2
Storage	MSD	microSD cardslot
	E04	eMMC capacity in Gigabytes
		E04 = 4GB / E08 = 8GB / E16 = 16GB E32 = 32GB / E64 = 64GB
Bluetooth / WiFi	-	-
	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)
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.