

PICO-IMX6POP-SD



Main Features

- The PICO-IMX6POP-SD design based on the Freescale i.MX6 multimedia processor is a purpose-built, small footprint hardware platform compatible with Intel Edison baseboards and adds a number of additional high-speed signals such as PCIe, RGMII LAN, USB as well as 24 bit TTL Display, LVDS, HDMI and MIPI CSI Camera and MIPI DSI Display options.
- ARM Cortex-A9 Freescale i.MX6 scalable dual / quad core System-on-Module
- WiFi 802.11ac and Bluetooth v. 4.0 communication interface



EDISON				
Power 3.3~4.5V	SDIO	I ² S	SPI	PWM
	USB OTG	UART	I ² C	GPIO

EXP-A	
LVDS	RGMII
TTL	

EXP-B			
CAN	PCIe	HDMI	SATA
I ² C	USB HOST	MIPI	

Specifications

Core System

CPU	Freescale i.MX6 Dual / Quad (PoP)
Technology	ARM Cortex-A9 dual/quad core @ 1Ghz
PMIC	Freescale MMPF0100
System Memory	up to 2GB LPDDR2
Storage	Micro SD cardslot

Connectivity

Gigabit Network RGMII	Signals routed to connector
WiFi	Broadcom BCM4339 802.11ac
Bluetooth	Broadcom BCM4339 BT 4.0

I/O Interface Signalling

Edison I/O @ 1.8V	9x GPIO
	4x PWM
	2x I ² C
	1x I ² S
	1x SPI
	2x UART
	USB-OTG
	SDIO (4-bit)
Additional I/O @ 3.3V	Single Channel LVDS
	24-bit TTL RGB
	HDMI 1.4
	MIPI CSI Camera
	MIPI DSI Display
	PCIe
	SATA II
	RGMII (gigabit LAN)
	Flex CAN version 2.0B Compliant
	USB Host

Video

GPU 3D	Vivante GC2000 200Mtri/s 1000Mpxl/s Open GL ES 2.0 & Halti, CL EP
GPU 2D (Vector Graphics)	Vivante GC355 300Mpxl/s OpenVG 1.1
GPU 2D (Composition)	Vivante GC320 600Mpxl/s, BLIT
Video Decode	1080p60 H.264
Video Encode	1080p30 H.264 BP / Dual 720p

Audio

Interface	I ² S (1 channel)
Audio Codec	On Carrier Board

Power Specifications

Input Power	3.3 ~ 4.5 VDC
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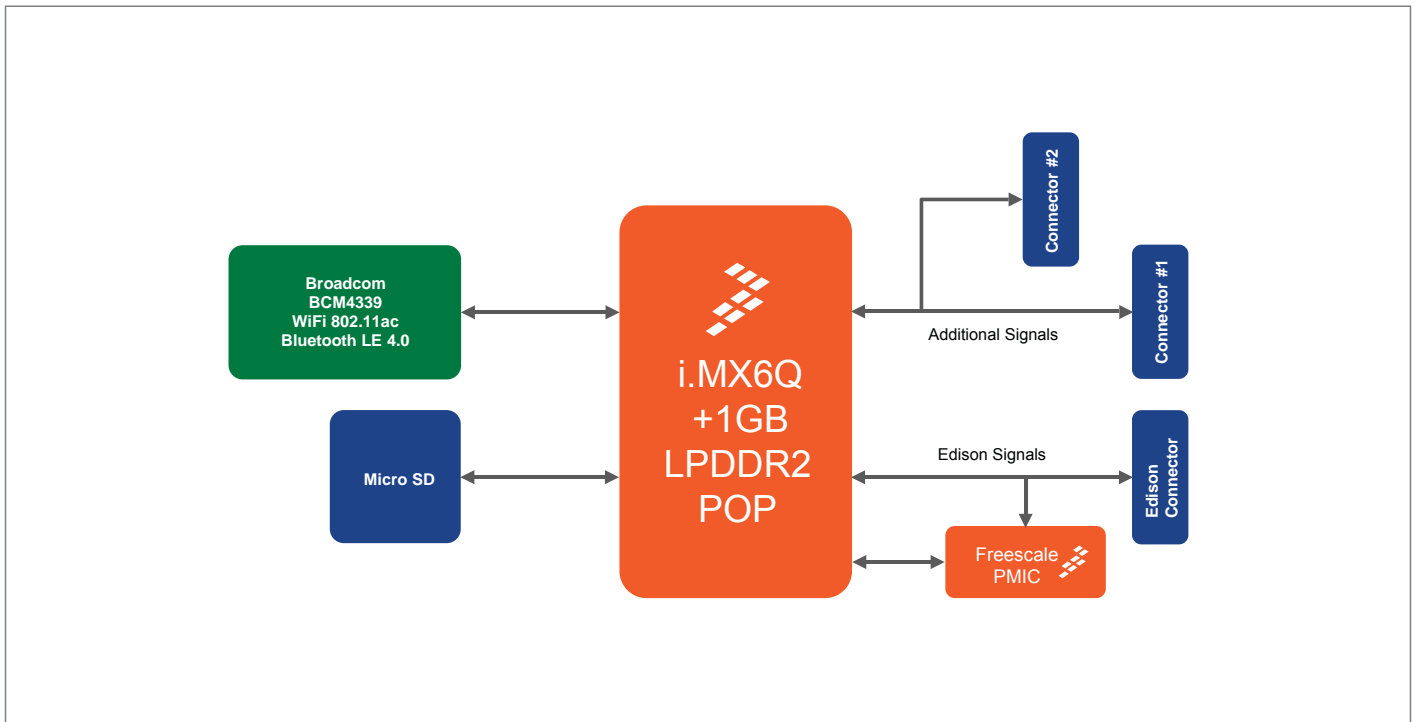
Connectors

Board-to-Board	1x Edison compatible connector (Hirose 70-pin) 2x Hirose 70-pin connectors
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Operation Systems

Standard Support	Linux 3.x, Yocto, Android 4.3, Android 4.4, Android 5.0, Ubuntu
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Block Diagram



Environmental and Mechanical

Temperature	Commercial : 0° to 60° C Extended : -20° to 70° C Industrial : -40° to 85° C (no WiFi)
Humidity	10 to 90%
Dimensions	36 x 40 mm 1 3/8 x 1 5/8 inch
MTBF	>100,000 hours
Weight	8 grams
Shock	50G / 25ms
Vibration	20G / 0-600 Hz

Ordering Information

PICOIMX6QP10R1GBSDBW

Pico SoM Freescale with i.MX6 Quad PoP + 1GB LPDDR2 + SD Cardslot + 802.11AC + Bluetooth 4.0

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

Dimensions

(units in mm)

