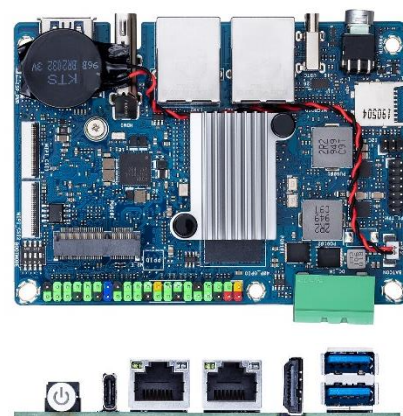


# IMX8P-IM-A

NXP® i.MX 8M ARM Cortex-A53 core, 4GB LPDDR4, HDMI, Dual LAN, 16G eMMC, 1\*M.2 E Key slot, 1\*Micro SD Card, 3\*USB 3.2 Gen 1

## Features

- Pico-ITX Single Board Computer with NXP® i.MX 8M low power and scalable processor
- 16G on board eMMC and Micro-SD card for storage capacity
- Support Windows 10 IoT Core and Linux Yocto OS
- Wide Temperature Range: -20~60°C

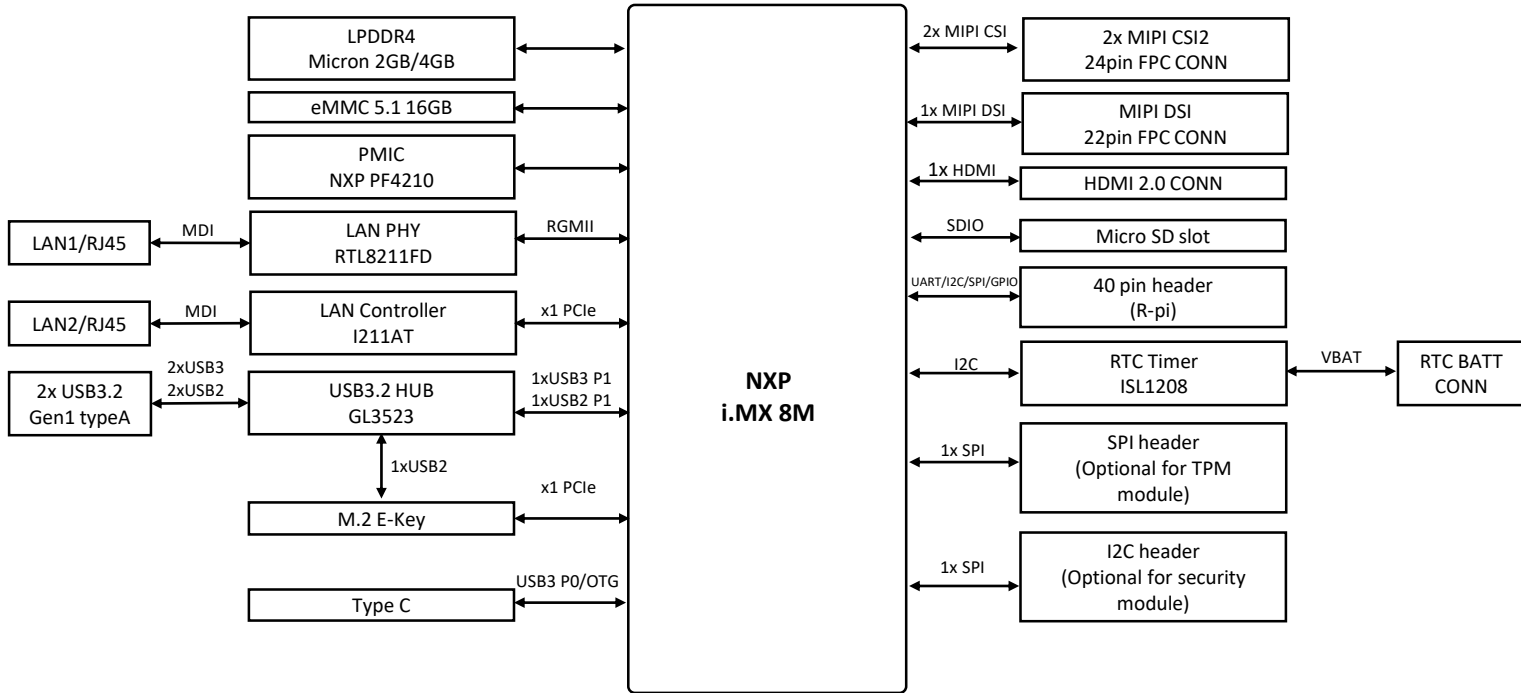


## Specifications

<b>Processor System</b>	CPU	NXP® i.MX 8 M ARM Cortex-A53 core
	MAX.SPEED	1.3 GHz
	L2 Cache	1MB
	Chipset	Integrated
<b>Memory</b>	Technology	LPDDR4
	Max.	4GB on board memory
<b>Display</b>	HDMI	1, Supports HDMI 2.0 up to 3840 x 2160 @ 60 Hz
	MIPI DSI	1, Supports MIPI DSI (2 lane) up to 1920 x 1080 @ 60 Hz
<b>Expansion Slot</b>	M.2	1 x M.2 2230 E Key for BT/WiFi module (cooperate with Google EdgeTPU Module)
	Others	1 x Micro-SD Card connector
<b>Ethernet</b>	Speed	10/100/1000Mbps
	Controller	1 x Realtek® RTL8211, supports WOL 1 x Intel I211-AT, supports WOL
	Connector	2 x RJ-45
<b>Storage</b>	eMMC	1 x 16GB onboard eMMC
<b>Front I/O</b>	HDMI	1
	USB3.2 Gen1	2@Type A, 5V/2A 1@Type C OTG, 5V/1.5A
	Ethernet	2
	Power Button	1
	Reset Button	1
<b>Rear I/O</b>	Power Connector	DC Power input
<b>Internal Connector</b>	GPIO Header	1 x 40-pin headers includes: - up to 6 x GPIO pins - up to 2 x I2C bus - up to 1 x UART - up to 2 x PWM - up to 1 x PCM/I2S - 2 x 5V power pins - 2 x 3.3V power pins - 8 x ground pins
	Micro-SD Card	1 Slot
	TPM Header	1 (14-1 pin)
	MIPI DSI	1, Supports MIPI DSI (4 lane) up to 1920 x 1080 @ 60 Hz
	MIPI CSI	2, support two MIPI-CSI camera inputs (4-lane each)
	I <sup>2</sup> C Header	1 (5-1 pin)
	<b>Watchdog Timer</b>	S/W
<b>Security Module</b>	TPM	TPM 2.0 power by Nuvoton NCPT 750 (Optional)
	Crypto Module	Cloud security power by Microchip ATECC608A/NXP SE050 (Optional)
<b>Manageability</b>		WOL
<b>Power</b>	Power Type	DC power input
	Voltage	12-24V DC input
<b>Operating System</b>	Linux	Linux Yocto
	Microsoft Windows	Windows 10 IoT Core (Limited support, beta version available)
<b>Environment</b>	Operating Temperature	-20~60°C
	Non-Operating Temperature	-40~85°C
	Relative Humidity	10~95%
<b>Dimension</b>	Form Factor	100mm x 72mm x 21mm
<b>Certification</b>	Safety	CE, FCC

## Block Diagram

IMX8P-IM-A  
Size: Pico-ITX



## Ordering Information

Model Name	Part Number	Description
IMX8P-IM-A	90ME01F0*	I.MX 8M,HDMI,DUAL LAN,MB

\* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

## Optional Accessories

Part Number	Description	Quantity
0C011-	WIFI5 AC+BT5.0(2*2)M.2 2230	1
14012-	WIFI RF CABLE ASSEMBLY SMA/MHF 14CM	2
14008-	WIFI_MAIN_ANTENNA	2
0A001-	Power Adaptor 65W	1
14G1100-	Power Cord	1

\* The part number might vary due to part number revision.