

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

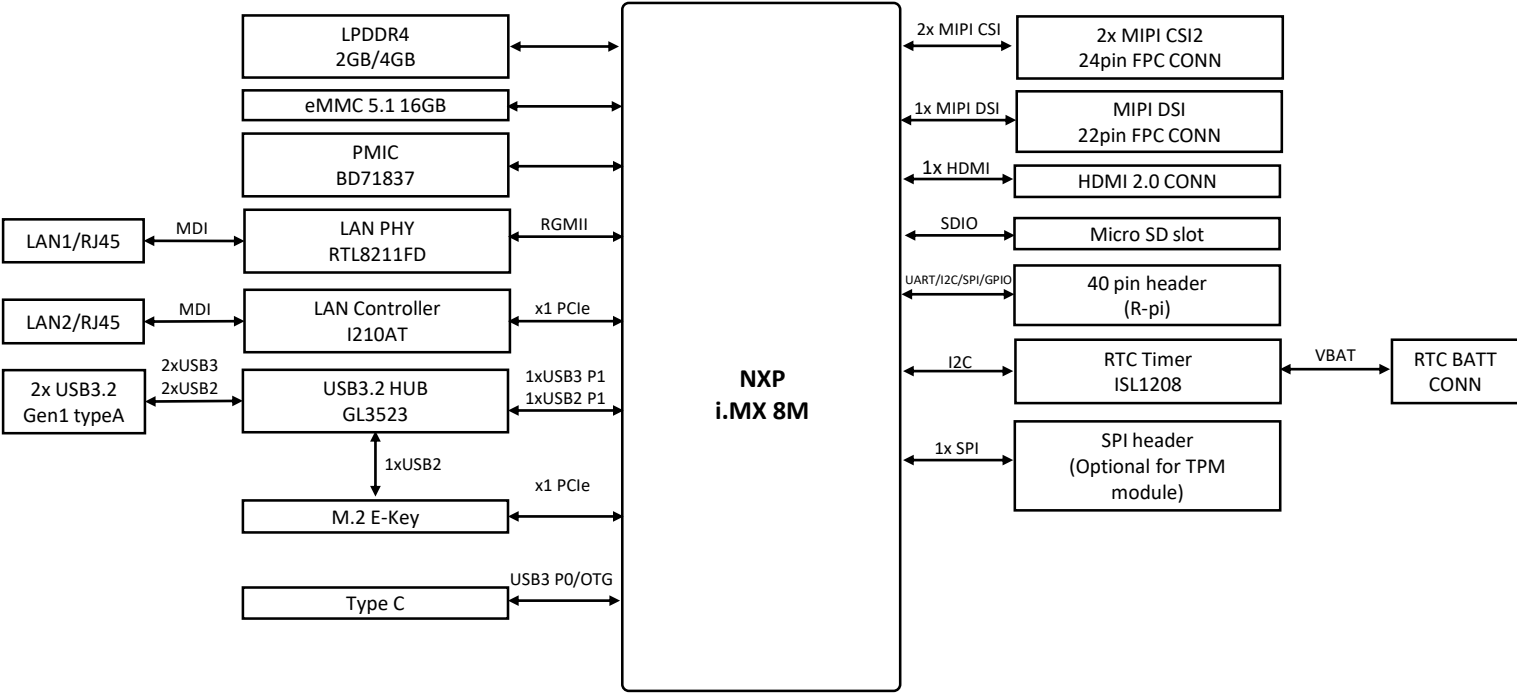
Specifications



Processor System	CPU	NXP® i.MX 8 M ARM Cortex-A53 core
	MAX.SPEED	1.3 GHz
	L2 Cache	1MB
	Chipset	Integrated
Memory	Technology	LPDDR4
	Max.	4GB on board memory
Display	HDMI	1, Supports HDMI 2.0 up to 3840 x 2160 @ 60 Hz
	MIPI DSI	1, Supports MIPI DSI (4 lane) up to 1920 x 1080 @ 60 Hz
Expansion Slot	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
Ethernet	Speed	10/100/1000Mbps
	Controller	1 x Realtek® RTL8211, supports WOL 1 x Intel I210-AT, supports WOL
	Connector	2 x RJ-45
Storage	eMMC	1 x 16GB onboard eMMC
Front I/O	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
Rear I/O	Power Connector	DC Power input
Internal Connector	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)
Watchdog Timer	S/W	Set up by software
Security Module	TPM	TPM 2.0 power by Nuvoton NCPT 750 (Optional)
Manageability		WOL
Power	Power Type	DC power input
	Voltage	12-24V DC input
Operating System	Linux	Linux Yocto
	Microsoft Windows	Windows 10 IoT Core (Limited support, beta version available)
Environment	Operating Temperature	-20~60°C
	Non-Operating Temperature	-40~85°C
	Relative Humidity	10~95%
Dimension	Form Factor	100mm x 72mm x 21mm
Certification	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
IMX8P-IM-A R2.0	90ME05V0*	I.MX 8M,HDMI,DUAL LAN,MB, I210-AT, NO I2C Header

* 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.

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