

PE100A

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

Features

- 16GB on board eMMC, Mini PCIe slot and Micro-SD card connector for storage capacity
- Compact size gateway with low power and scalable processor for diverse IoT applications
- Support Linux Yocto OS and limited support Windows 10 IoT Core
- Wide Temperature Range: -20~60°C

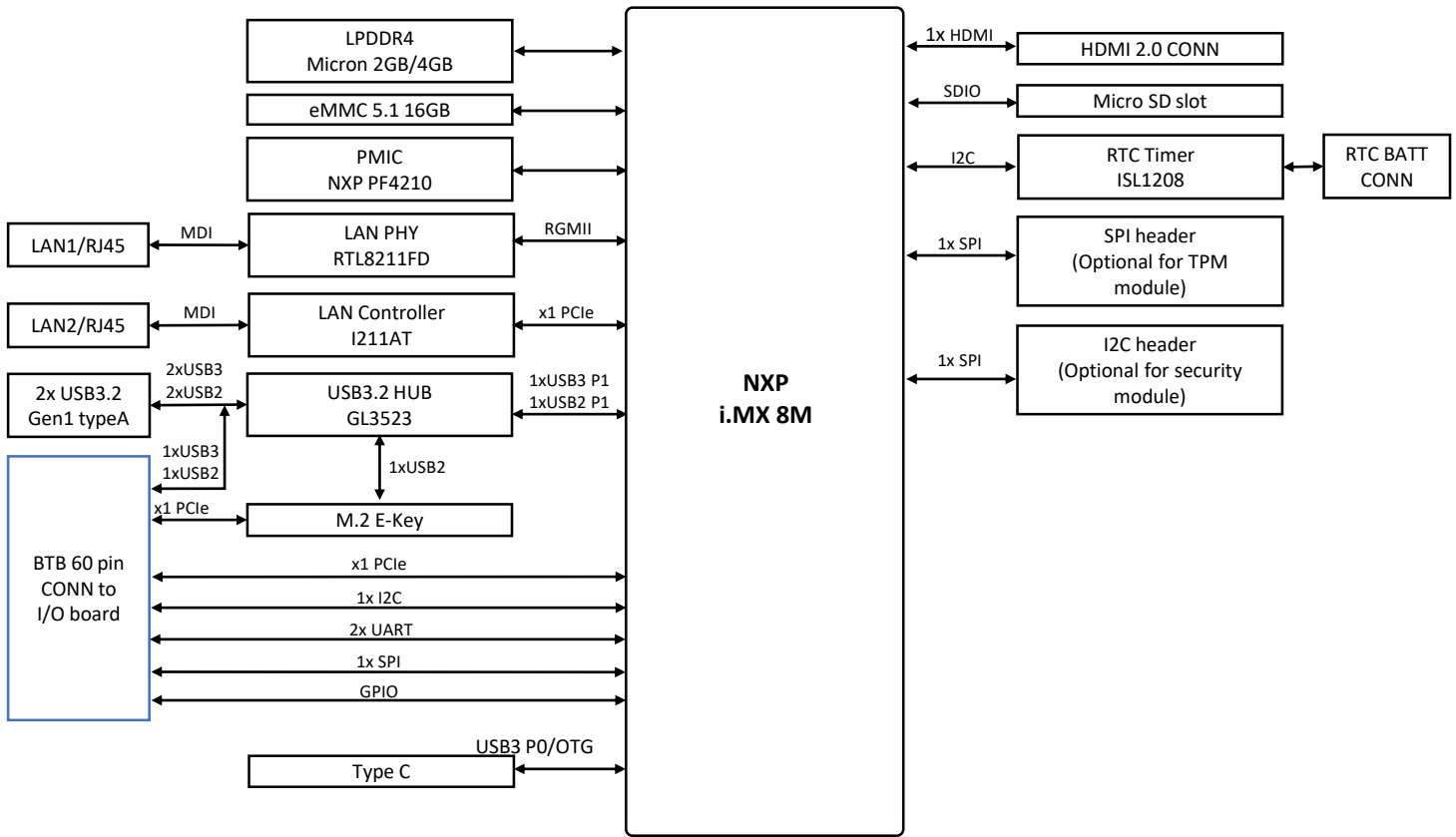


Specifications

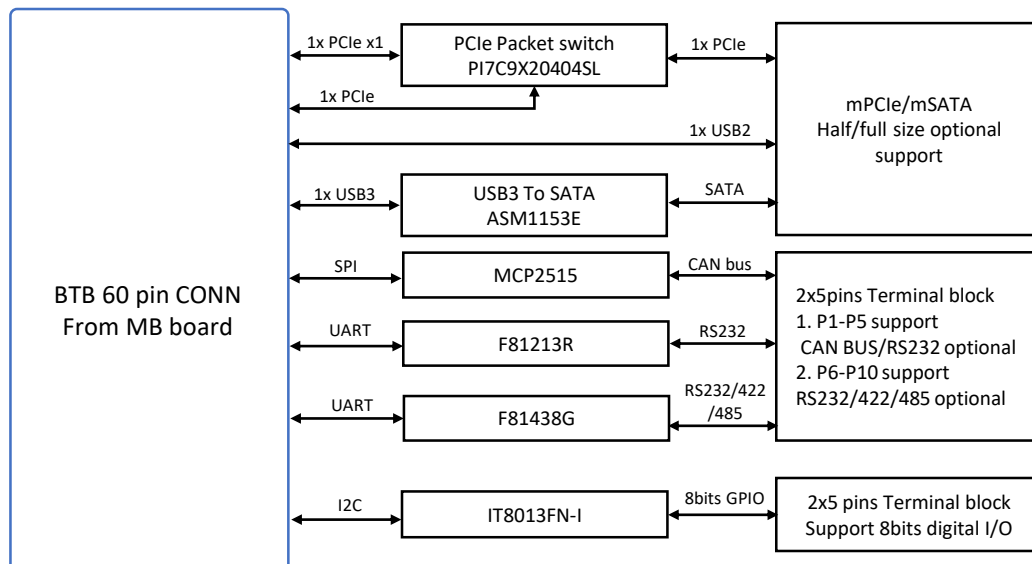
Processor System	CPU	NXP® i.MX 8M ARM Cortex-A53 core
	MAX.SPEED	1.3 GHz
	L2 Cache	1MB
	Chipset	Integrated
Memory	Technology	LPDDR4
	Max.	4GB on board memory
Display	HDMI	1, Supports HDMI 2.0 up to 3840 x 2160 @ 60 Hz
Expansion Slot	Mini PCIe	1 x Full/Half Length Mini PCIe slot (support mSATA)
	M.2	1 x M.2 2230 E Key for BT/WiFi module (cooperate with Google Edge TPU Module)
	SIM	1 x on-board Nano-SIM socket
	Micro-SD Card	1 x Micro-SD Card connector
Ethernet	Speed	10/100/1000Mbps
	Controller	1 x Realtek® RTL8211, supports WOL 1 x Intel I211-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
Rear I/O	Terminal Block	1 x COM terminal support 2 x COM headers; 1 x RS-232/422/485, 1 x RS-232/CANBus (COM terminal block is optional) 1 x DIO terminal; 4*DI, 4*DO (DIO terminal block is optional)
	Power Connector	DC Power input
Watchdog Timer	S/W	Setup by software
Security	TPM header	TPM header, cooperate with TPM 2.0 power by Nuvoton NCPT 750 (Optional)
	I2C header	I2C header (6-1 pin), Cooperate with Cloud security power by Microchip ATECC608A/NXP SE050 (Optional)
Manageability		WOL
Power	Power Type	DC power input
	Voltage	12-24V DC input
Operating System	Microsoft Windows	Windows 10 IoT Core (Limited Support, beta version available.)
	Linux	Linux Yocto
Environment	Operating Temperature	-20~60°C
	Non-Operating Temperature	-40~85°C
	Relative Humidity	10 ~ 95%
Dimension	Mounting	Wall-Mount, DIN-Rail (Compatible with 30mm Rail Mount Kit)
	Weight	0.775 KG
	Form Factor	145(L)x78(W)x55.5(H)mm

Block Diagram

PE100A_MB
Size: Pico-ITX



PE100A_I/O
Size: Pico-ITX



Ordering Information

Model Name	Part Number	Description
PE100A	90AE0020*	NXP, i.MX 8M, QUAD-CORE, ARM Cortex-A53 processor, 4GB LPDDR4, HDMI, Dual LAN, 16GB eMMC, M.2 Ekey Slot, Micro-SD Card Slot, USB 3.2 Gen1, Mini-PCle, Edge Computer

* 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
14012-	WWAN RF CABLE ASSEMBLY SMA/MHF 19CM	2
14012-	WIFI RF CABLE ASSEMBLY SMA/MHF 14CM	2
14008-	WWAN_MAIN_ANTENNA	2
14008-	WIFI_MAIN_ANTENNA	2
0C011-	WIFI5 AC+BT5.0(2*2)M.2 2230	1
0C031-	MINIPCIE LTE MODULE	1
03B03-	SSD SATA3 32GB MSATA MLC	1
03B03-	SSD SATA3 32GB MSATA MLC (WT)	1
12031-	TERMINAL BLOCKS 2X8P 3.5MM GREEN W/BAG	1
12031-	TERMINAL BLOCKS 2X5P 3.5MM GREEN W/BAG	1

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

Packing List

Part Number	Description	Quantity
13AE00-	Wall-mount Bracket	2
0A001-	Power Adaptor 65W	1
14G1100-	Power Cord	1

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