

# PE100A

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



## Features

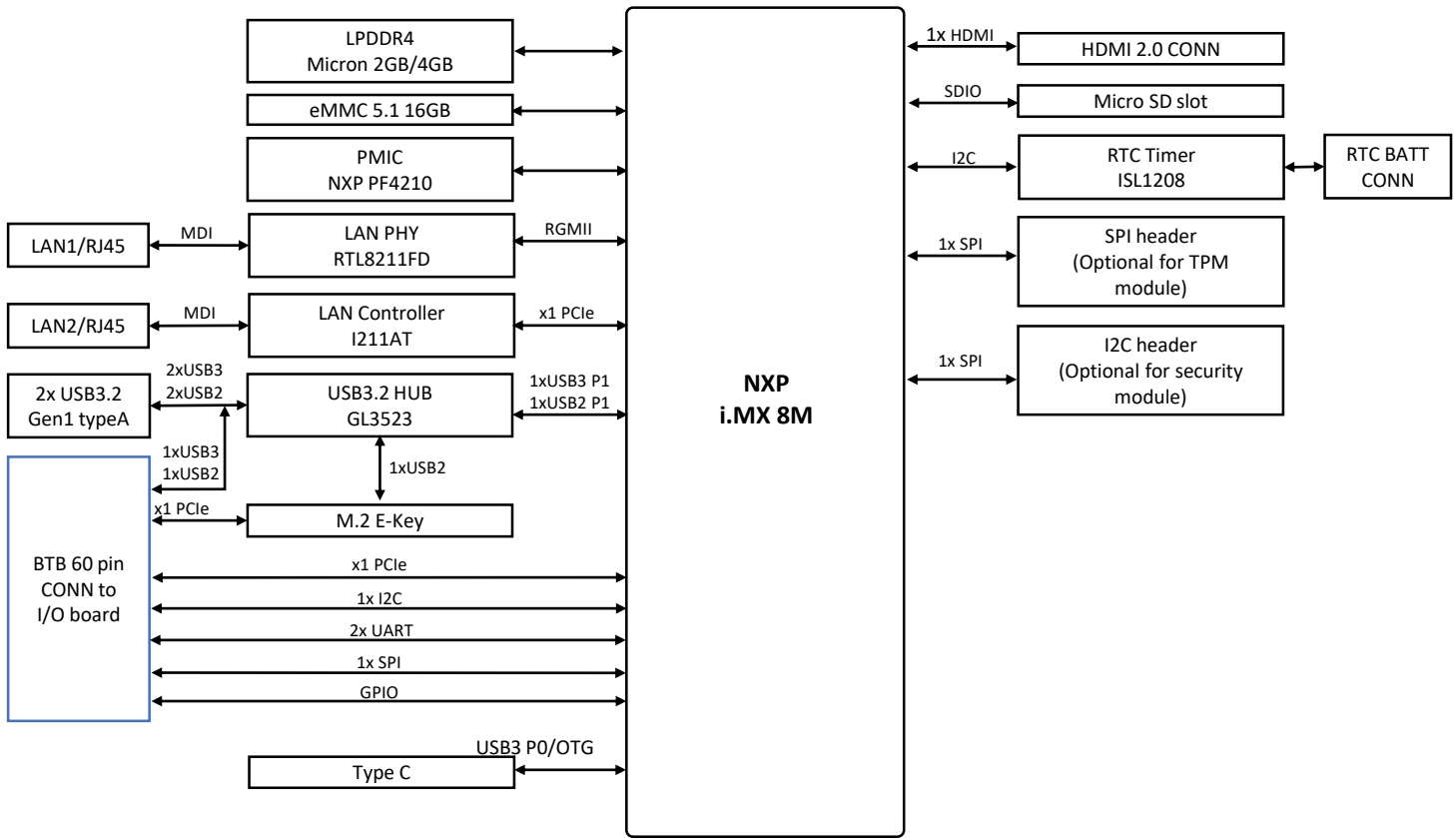
- 16GB on board eMMC, Mini PCIe slot and Micro-SD card connector for storage capacity
- Compact size gateway with low power and scalable processor for diverse IoT applications
- Support Windows 10 IoT Core and Linux Yocto OS
- Wide Temperature Range: -20~60°C

## Specifications

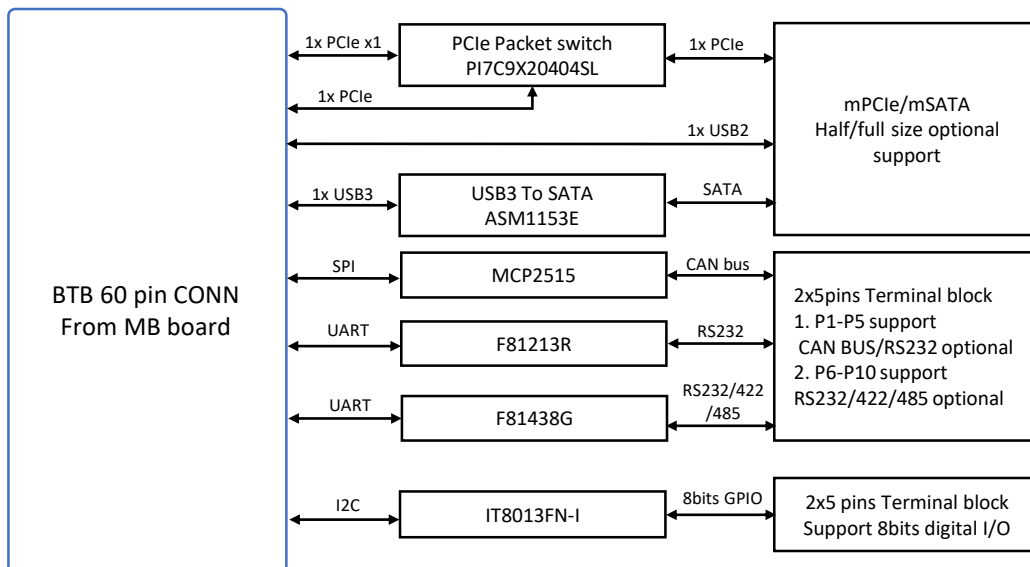
<b>Processor System</b>	CPU	NXP® i.MX 8M ARM Cortex-A53 core
	MAX.SPEED	1.3 GHz
	L2 Cache	1MB
	Chipset	Integrated
<b>Memory</b>	Technology	LPDDR4
	Max.	4GB on board memory
<b>Display</b>	HDMI	1, Supports HDMI 2.0 up to 3840 x 2160 @ 60 Hz
<b>Expansion Slot</b>	Mini PCIe	1 x Full/Half Length Mini PCIe 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
<b>Ethernet</b>	Speed	10/100/1000Mbps
	Controller	1 x Realtek® RTL8211, 1 x Intel I211-AT
	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
<b>Rear I/O</b>	Terminal Block	1 x COM terminal (Support 2 x COM headers; 1 x RS-232/422/485, 1 x RS-232/CANBus) 1 x DIO terminal (4*DI, 4*DO)
	Power Connector	DC Power input
<b>Watchdog Timer</b>	S/W	Setup by software
<b>Security</b>	TPM Module	Cooperate with TPM 2.0 power by Nuvoton NCPT 750 (Optional)
	Crypto Module	Cooperate with 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>	Microsoft Windows	Windows 10 IoT Core
	Linux	Linux Yocto
<b>Environment</b>	Operating Temperature	-20~60°C
	Non-Operating Temperature	-40~85°C
	Relative Humidity	10 ~ 95%
<b>Dimension</b>	Mounting	Wall-Mount, DIN-Rail (Optional)
	Weight	0.775 KG
	Form Factor	145(w)x78(L)x55.5(H)mm

# Block Diagram

PE100A\_MB  
Size: Pico-ITX



PE100A\_I/O  
Size: Pico-ITX



## Ordering Information

Model Name	Description
PE100A	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

## 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
0A001-	ADAPTER 65W 19V C6 IPC BLK	1

## Packing List

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

## OS Option

Type	Version
Windows 10	Windows 10 IoT Core
Linux	Linux Yocto