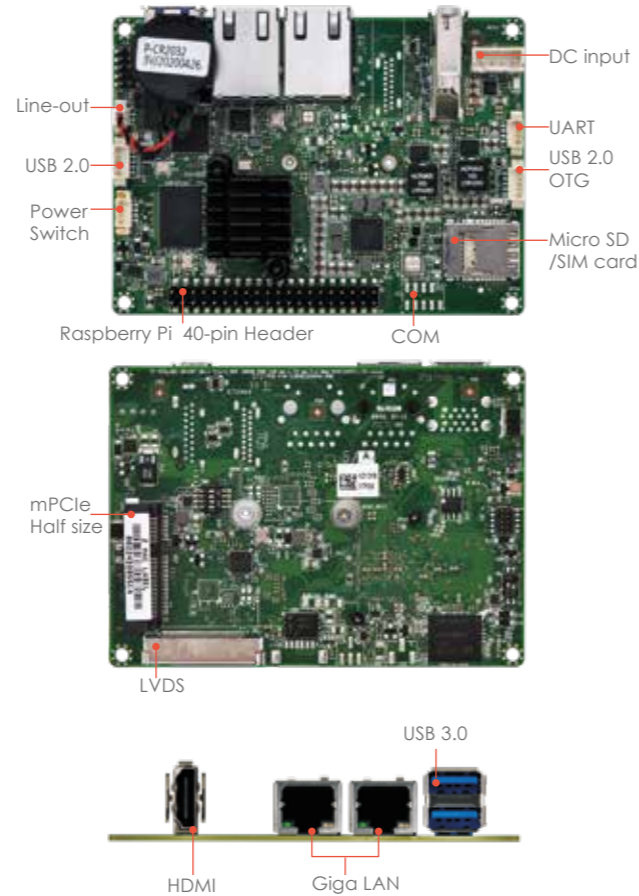


ND108T

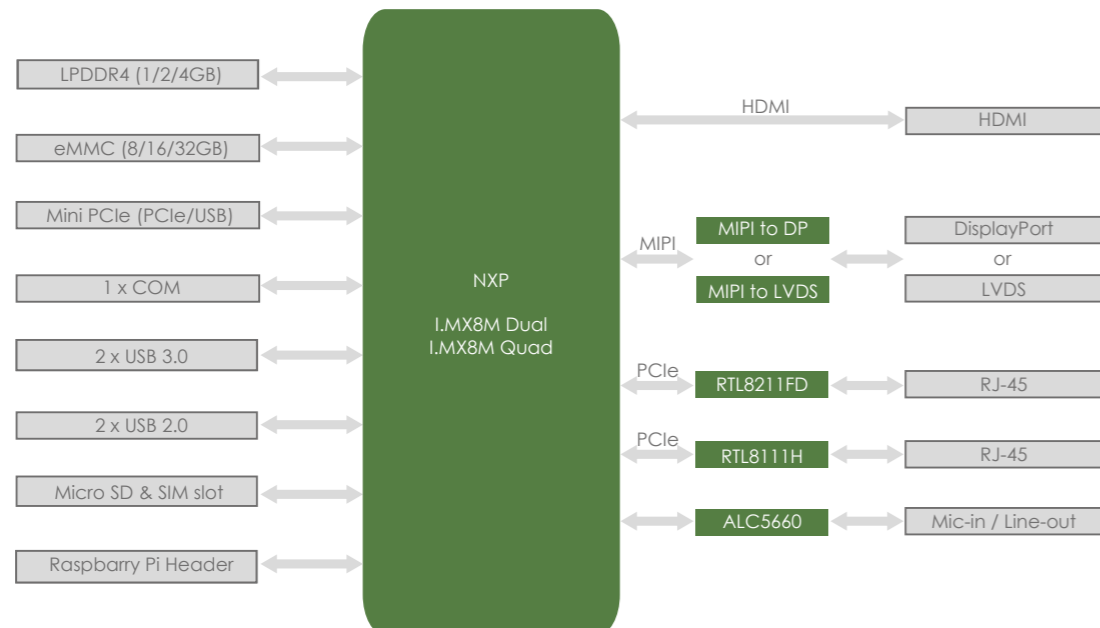
Pico-iTX Form Factor
NXP® i.MX8M Family

Features

- NXP® i.MX8M Dual Core & Quad Core Processor
- LPDDR4 Memory (Options for 1GB / 2GB / 4GB)
- eMMC Storage (Options for 8GB / 16GB / 32GB)
- Support up to 2 x Giga LAN
- Support up to 2 x display: 1x HDMI (4K), 1 x DisplayPort(FHD) or LVDS(FHD)
- Support 1 x Mini PCIe expansion slot
- Support 1 x Raspberry Pi fully Compatible 40-pin Header
- Up to 2 x USB 3.0, 2 x USB 2.0, 12V DC Power Input
- 1 x COM port (RS232/422/485)



Block Diagram



ND108T Pico-iTX

MECHANICAL	
Form Factor	Pico-iTX 2.5" SBC: 3.94" x 2.84" (100 mm x 72 mm)
SYSTEM	
Processor	NXP® i.MX8M Family: 8M Quad (4x Cortex-A53 @ 1.3GHz) / 8M Dual (2x Cortex-A53 @ 1.3GHz)
Chipset	i.MX8M SoC Integrated
Memory	LPDDR4 Onboard Memory with Options: 1GB (1200MHz), 2GB (1600MHz), 4GB (1600MHz)
Graphics	i.MX8 Integrated
Ethernet	2 x Realtek Giga LAN (1st LAN: RTL8211FD; 2nd LAN: RTL8111H)
Audio	Realtek ALC5660
I/O Chipset	Nuvoton NCT6126D(eSPI)
TPM	TPM Header / (support TPM module board NPCT750)
Expansion Slot	Mini PCIe Full / Half Size (PCIe / USB)
BIOS	AMI BIOS, 128 Mbit SPI
H / W Monitor	Temperature Monitor, Voltage Monitor, Fan Monitor
Watchdog Timer	Yes
Storage	Onboard eMMC with Options for 8GB / 16GB / 32GB 1 x Micro SD card slot (Up to 256GB)
GRAPHICS	
VGA	—
DVI	—
HDMI	Up to 4K (4096 x 2160) @60 Hz
DisplayPort	Up to FHD (1920 x 1080) @60 Hz
LVDS	Up to FHD (1920 x 1080) @60 Hz
eDP (Option)	—
REAR I/O	
USB	2 x USB 3.0
Display I/O	1 x HDMI 2.0, 1 x DisplayPort 1.2
Audio I/O	—
LAN I/O	2 x RJ-45
Serial Port	—
PS/2 Port	—
Others	—
INTERNAL CONNECTORS	
Storage	1 x Micro-SIM/Micro SD combo card slot
USB	1 x USB2.0 Port Header / 1 x USB 2.0 OTG port Header
Display I/O	1 x LVDS / 1 x LCD PWR Selection Header 1 x Backlight PWR Header
Audio I/O	1 x Line-out / Mic-in Header
Serial Port	1 x RS232/422/485 Header
PS/2 Port	—
GPIO	1 x MiAPI Header (Programmable, Support 10-bit GPIO)
Front Panel	1 x Front Panel Header
Power	1 x 12V 4-pin Power Connector
Others	1 x 40-pin General Purpose Header (Fully Compatible with Raspberry Pi 40-pin Header) *Raspberry Pi is a trademark of the Raspberry Pi Foundation
POWER REQUIREMENT	
Power Input	DC-in 12V (4-pin Power Connector)
ENVIRONMENTAL	
Operating Temperature	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-20 ~ 70°C (-4 ~ 158°F)
Operating Humidity	10% ~ 95% R/H, non-condensing
Certification	CE & FCC Class B
OS	
OS Support	Yocto Sumo (Kernel version 4.14.98) BSP Support Android 9 Pie (Kernel version 4.14.98) BSP Support <small>(Remark: Android is suggested for 2G or 4G memory MB SKU)</small>

Ordering Information

Model Number	Processor	DDR4	eMMC	Display	LAN	COM Port
ND108T-8MD-1G8G-LVDS	i.MX8M Dual Core	1 GB	8 GB	HDMI + LVDS	1	0
ND108T-8MD-2G16G-LVDS	i.MX8M Dual Core	2 GB	16 GB	HDMI + LVDS	1	0
ND108T-8MQ-4G32G-LVDS	i.MX8M Quad Core	4 GB	32 GB	HDMI + LVDS	2	1

Packing List

Packing	• 1 x Mainboard	• 1 x Quick Guide
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