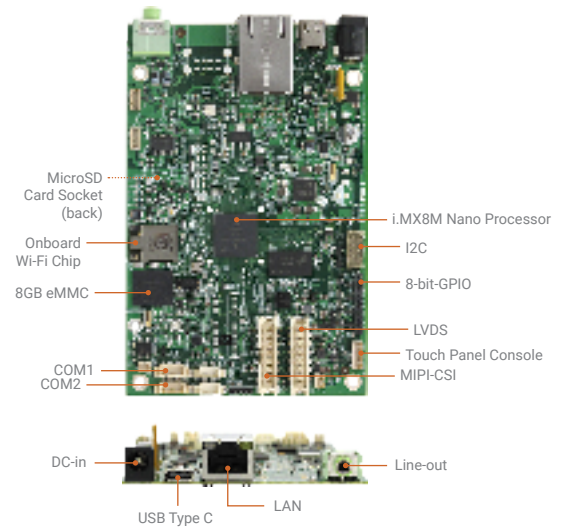


Features

- NXP i.MX8M Nano 4x Cortex®-A53 cores and 1x Cortex-M7 core processor onboard
- 1GB Onboard DDR4 Memory (expandable up to 2GB Max)
- Onboard 16GB eMMC Flash, 1 x MicroSD Card Slot
- 3D GPU (2x shader, OpenGL ES 2.0/3.0/3.1, OpenCL 1.2, Vulkan)
- 1 x LVDS and 1 x MIPI-CSI
- Wolfson® WM8960 Ultra Low Power Audio Codec
- TI® TPA2008D2 3-W Stereo Class-D Audio Amplifier
- 1 x Micrel® KSZ9031 Gigabit Ethernet
- Optional AzureWave® AW-CM389NF 802.11 a/b/g/n/ac + BT 4.0 via SDIO
- Onboard I/O: MIPI-CSI, LVDS, 2 x RS-232 COM, 2 x I2C, I2C Touch Panel Connector, 1 x 8-bit GPIO, 1 x Front Panel, Mic-in, Line-out
- Back I/O Panel: RJ-45 LAN, USB Type C OTG, Line-out, DC-in
- 5V DC Input
- Compact size (4.72" x 3.07") (palm size)

Specifications



System	
CPU	NXP i.MX8M Nano Processor onboard: 4x Cortex-A53 core platforms up to 1.5GHz per core 32 kB L1-I Cache / 32 kB L1-D Cache 512 kB L2 Cache 1x Cortex-M7 core up to 750MHz 512 kB on-chip RAM (OCRAM)
System Memory	1GB Onboard DDR4 Memory (expandable up to 2GB Max)
Storage	Onboard 16GB eMMC Flash 1 x MicroSD Card Slot
Audio	Wolfson® WM8960 Ultra Low Power Audio Codec
Amplifier	TI® TPA2008D2 3-W Stereo Class-D Audio Amplifier
Ethernet	1 x Micrel® KSZ9031
RTC	Optional Seiko® S-35390 External RTC
Wireless	Optional AzureWave® AW-CM389NF 802.11 a/b/g/n/ac + Bluetooth 4.0 Through SDIO
Supported OS	Android 9.0, Linux

Display	
Chipset	3D GPU GC7000UL (2x shader, OpenGL ES 2.0/3.0/3.1, OpenCL 1.2, Vulkan)
Interface	1 x LVDS Through MIPI to LVDS Bridge

External I/O	
Audio	1 x Line-Out
USB	1 x USB Type C OTG
LAN	1 x RJ-45
DC-in	1 x Barrel Type Connector

Internal I/O	
Display	1 x LVDS Header 1 x MIPI-CSI Header
COM	2 x RS-232 COM
Audio	Mic-in, Line-out
MIO	2 x I2C, I2C Touch Panel Connector, 1 x 8-bit GPIO, 1 x Front Panel

Mechanical & Environment	
Power	5V DC Input
Operating Temp	0°C ~ 60°C (32°F ~ 140°F)
Storage Temp	-20°C ~ 80°C (-40°F ~ 176°F)
Operating Humidity	5% ~ 95% Relative Humidity, Non-condensing
Form Factor	Custom, Small Form Factor
Dimensions	4.72" x 3.07" (120mm x 78mm)
Certification Information	CE, FCC Class B
Weight	3.5 oz

Ordering Info	
AR8MXMN	NXP i.MX 8M Nano Compact ARM Motherboard

* All product specifications and images are subject to change without notice. Last update: 2020/03/30

