

FLEX-WIZARD-IMX8M-MINI



Main Features

- TechNexion FLEX-WIZARD-IMX8M-MINI platform can be applied in a wide range of applications ranging from simple IoT devices to applications with high level of complexity.
- Featuring NXP i.MX8M Mini Quad processor that runs up to 1.8GHz per core, based on the ARM Cortex A-53 + M4 architecture, delivered in advanced low-power process.
- Featuring video quality with 1080p resolution.
- Software source code at your fingertips: Android, Linux and Yocto.



yocto
PROJECT



Specifications

Core System

Processor	NXP i.MX8M Mini Quad
Processor Speed	1.8GHz
Architecture	ARM Cortex-A53 + M4
PMIC	ROHM BD71847
Memory	up to 4GB LPDDR4
Storage	16GB eMMC (default)
Board-to-Board Connector	260-pin DDR4 SO-DIMM
System on Module	FLEX SOM
Debug Interface	JTAG Interface by Through-hole UART Interface by Through-hole

Connectivity

Network LAN	1x Atheros AR8035 Gigabit LAN
Wi-Fi/Bluetooth	Qualcomm QCA9377 802.11 a/b/g/n/ac + BT (BR+EDR+BLE)
Antenna	MHF4 connector

Expansion Interfaces

Expansion Slots	1x M.2 slot 1x mini-PCIe
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Internal Headers

Internal Display	MIPI DSI signals on 70-pin Hirose connector
Expansion Headers	GPIO I ² C I ² S PWM SPI UART USB

External Connectors

Audio Connectors	CTIA compliant 3.5mm audio jack
Network	1x RJ45
USB	1x USB 3.0 OTG (Type-C) 2x USB 3.0 Host
Buttons	1x Reset
SIM Cardslot	2x Micro-SIM cardslot
SD Cardslot	1x microSD cardslot

Video

Graphic Engine	Vivante GC Nano Ultra
Video Decode	1080p60 H.264
Video Encode	1080p60 H.264
Camera	MIPI CSI (4 lanes)

Audio

Audio Codec	Cirrus Logic WM8960
Speaker	Audio speaker connector (stereo) (2W pre-amplified)

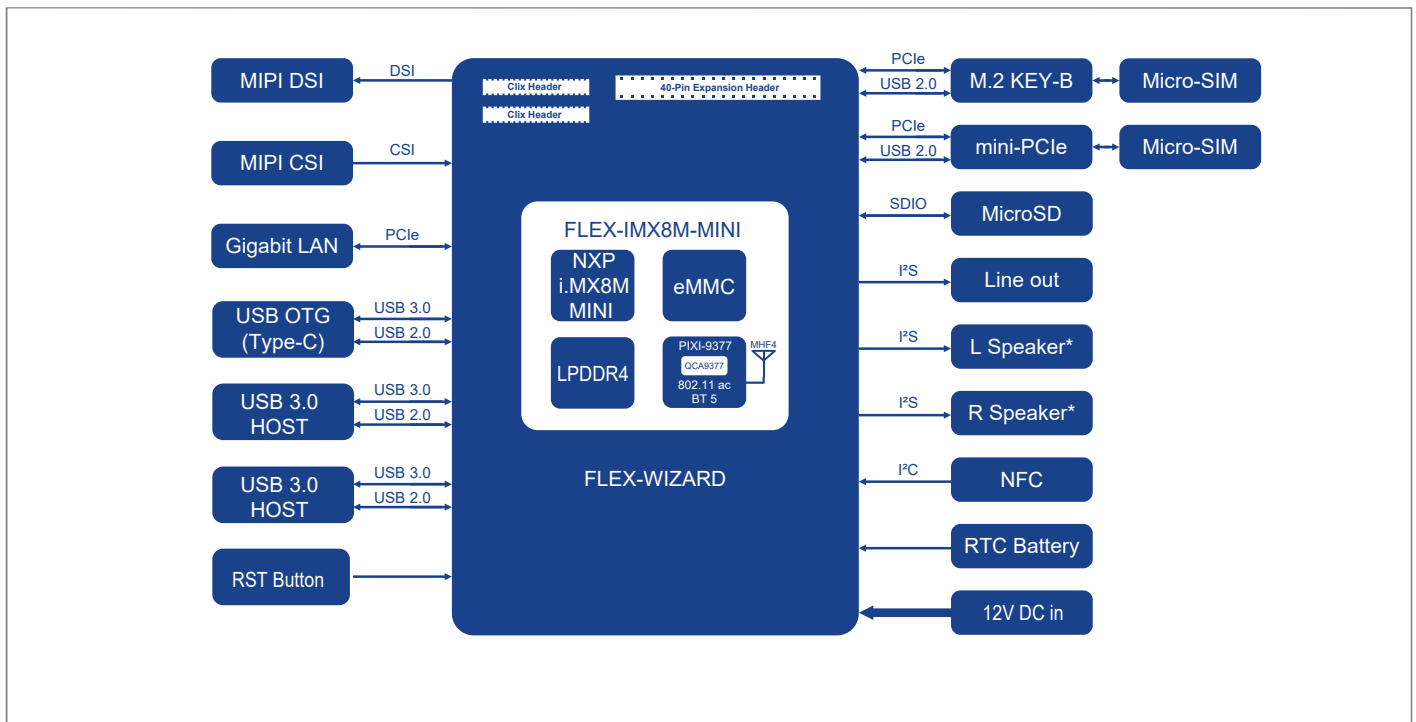
Power Specifications

Power Input	12V DC +/-5%
Power Connector	2-pin Micro-Fit 3.0
Power Consumption	Depending on Configuration

Operation Systems

Standard Support	Linux Yocto Android
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Block Diagram



Environmental and Mechanical

Dimensions	170 (W) x 170 (H) x 22 (D) mm
Form Factor	Mini-ITX
Weight	180 grams
Operation Temperature	Commercial: 0° to +50° C
Relative Humidity	10 to 90 %
MTBF	50 000 Hours
Shock	15G half-sine 11 ms duration
Vibration	1 Grms random 5-500Hz hr/axis

Certification and Compliance

Certification	Compliant with RoHS / REACH directives
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Ordering Information

FLEX-WIZARD-IMX8M-MINI

NXP i.MX8M Mini Quad Development Board with up to 4GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including MHF4 antenna, USB Type-C and UART debug cables, RTC battery, 2-pin Micro-Fit 3.0 DC power latch cable, stands and optional 5"/8"/10.1" PCAP Multi Touch LCD display, 5MP camera module, HDMI expander card or HDMI capture card.

