

# 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
-----------------	-----------------------------

### Internal Headers

Internal Display	MIPI DSI signals on 70-pin Hirose connector
Expansion Headers	GPIO I <sup>2</sup> C I <sup>2</sup> 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)

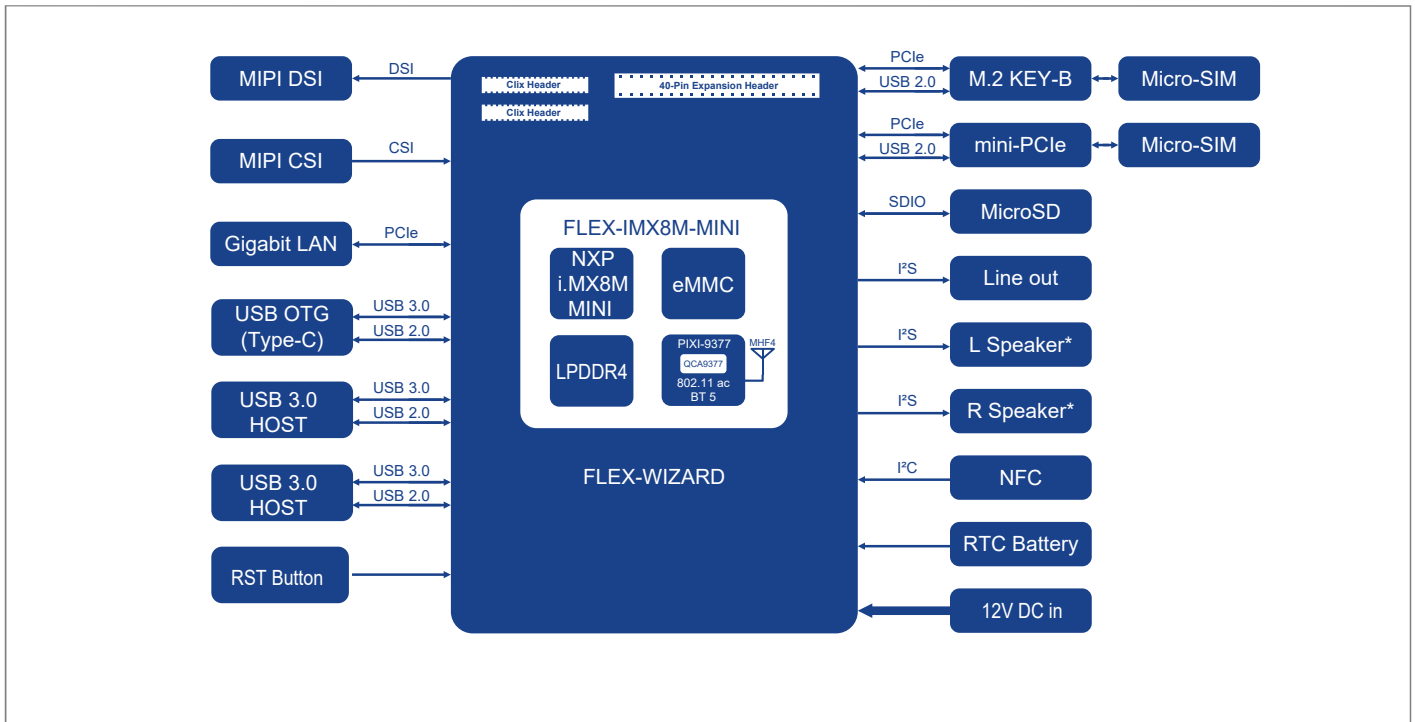
### Power Specifications

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
------------------	---------------------------

### 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
---------------	--

### 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.

