

FLEX-PI-IMX8M-MINI



Main Features

- TechNexion FLEX-PI-IMX8M-MINI evaluation kits, based on NXP i.MX8M Mini (ARM Cortex A-53 + M4 architecture), introduce groundbreaking functionality to a wide spectrum of next-generation devices.
- The development kit's features include high-performance compute, advance video processing, power efficiency, and embedded security.
- FLEX-PI-IMX8M Mini brings new capabilities to your next-gen smart designs, as well as other compute-intensive use cases, such as industrial controls, building automation, machine vision, imaging and scanning.
- Software source code at your fingertips: Android, Linux, Yocto and Ubuntu.

Specifications



Core System

Processor	NXP i.MX8M Mini
Processor Speed	up to 1.8GHz
Architecture	ARM Cortex-A53 + M4
PMIC	ROHM BD71847
Memory	up to 4GB LPDDR4
Storage	eMMC (16GB Default)
System on Module	FLEX SOM
Debug Interface	Micro USB debug

Connectivity

Network LAN	1x Atheros AR8031 Gigabit LAN
Wi-Fi/Bluetooth	Qualcomm QCA9377 802.11 a/b/g/n/ac + BT (BR+EDR+BLE)
Antenna	MHF4 connector

Signaling

I/O	MIPI CSI	SDIO
	MIPI DSI	UART
	LAN	SPI
	PCIe	I ² C
	USB	PWM
	USB OTG	GPIO
	I ² S	

External Connectors

Network	1x RJ45
USB	1x USB 2.0 Host 1x USB 2.0 OTG (Type-C)
Buttons	1x Reset
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)

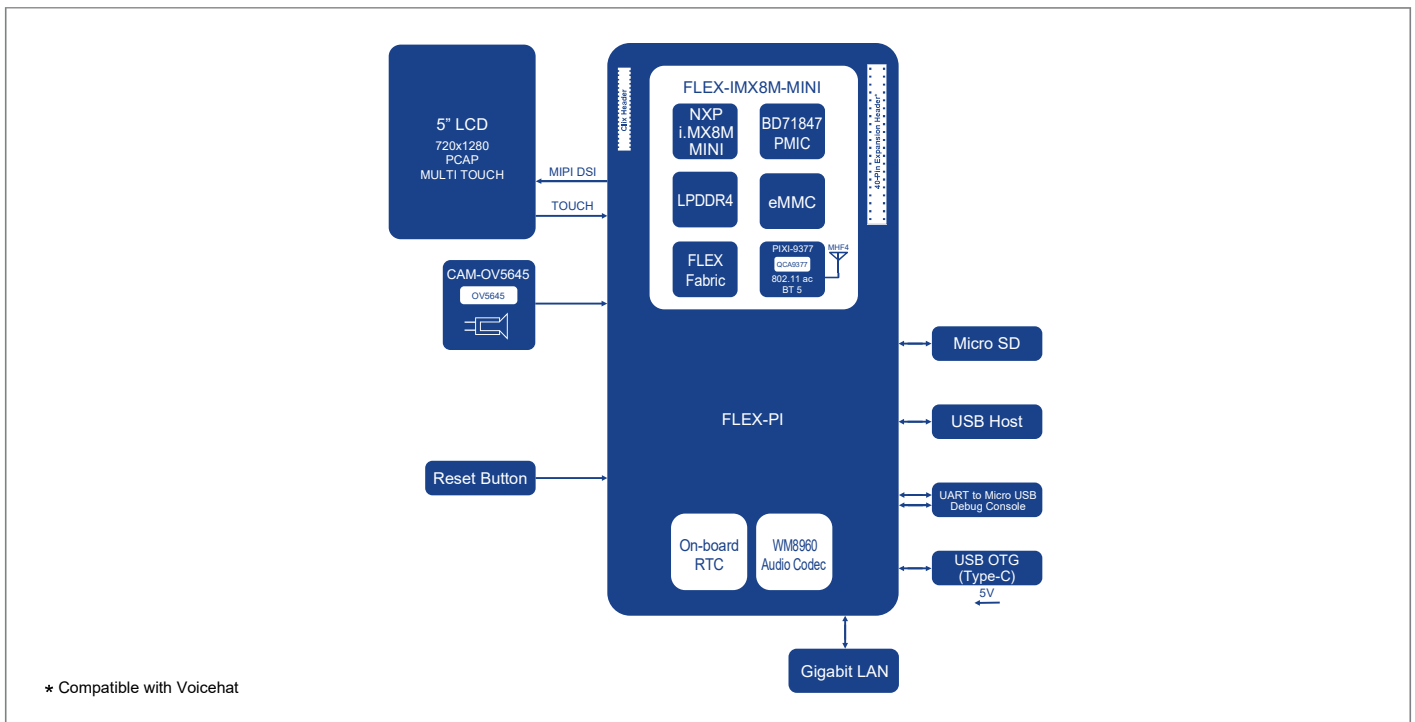
Operation Systems

Standard Support	Linux Yocto Android
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Certification and Compliance

USA	FCC ID: 2AKZA-QCA9377
Canada	IC: 22364-QCA9377
Japan	TELEC: 201-180629
European Union	EN 55032 / EN 55024 EN 300 328 v2.2.2 EN 301 893 v2.1.1
Australia/New Zealand	RCM
Bluetooth Logo	QDID150839 (Bluetooth 4.2)
Certification	Compliant with RoHS / REACH directives

Block Diagram



Environmental and Mechanical

Dimensions	85 x 56 mm
Form Factor	FLEX Compute Module
Weight	56 grams
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

Power Specifications

Power Input	5V DC +/-5%
Power Consumption	Depending on Configuration

Order Information :

FLEX-PI-IMX8M-MINI-1G-DEV

NXP i.MX8M Mini Quad Development Board with 1GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including antenna, VOICEHAT kit, camera module, 5 inch PCAP display, cable set and cardboard stand.



FLEX-PI-IMX8M-MINI-2G-DEV

NXP i.MX8M Mini Quad Development Board with 2GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including antenna, VOICEHAT kit, camera module, 5 inch PCAP display, cable set and cardboard stand.



FLEX-PI-IMX8M-MINI-4G-DEV

NXP i.MX8M Mini Quad Development Board with 4GB LPDDR4, 16GB eMMC and Wi-Fi + BT wireless connectivity including antenna, VOICEHAT kit, camera module, 5 inch PCAP display, cable set and cardboard stand.



Dimensions (units in mm)

