PICO-PI-IMX8M



Main Features

- TechNexion PICO-PI-IMX8M evaluation kits, based on NXP i.MX8M (ARM Cortex A-53 + M4 architecture), introduce groundbreaking functionality to a wide spectrum of nextgeneration devices.
- The development kit's features include high-performance compute, advance video processing, power efficiency, and embedded security.
- PICO-PI-IMX8M 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 Quad Processor Speed 1.3GHz

Architecture ARM Cortex-A53 + M4
PMIC ROHM BD71837
Memory up to 4GB LPDDR4
Storage up to 16GB eMMC

Board-to-Board Connector PICO 70-pin Hirose connectors

System on Module PICO SOM
Debug Interface Micro USB debug

Connectivity

Network LAN 1x Atheros AR8031 Gigabit LAN Wi-Fi/Bluetooth Qualcomm QCA9377 (optional) 802.11 a/b/g/n/ac + BT 5 (BR+EDR+BLE)

Antenna MHF4 connector (optional)

Internal Headers

Internal Display MIPI CSI+DSI signals on FPC connectors

Expansion Headers GPIO

I²C I²S PWM SPI UART **External Connectors**

External Display 1x HDMI Network 1x RJ45

USB 1x USB 2.0 Host

1x USB 2.0 OTG (Type-C)

Buttons 1x Reset

Video

Graphic Engine Vivante GC7000Lite
Video Decode 4K UltraHD HDR 4Kp60

H.265 VP9

Camera MIPI CSI (4 lanes)

Audio

Audio Interface I²S (2 channel)

Power Specifications

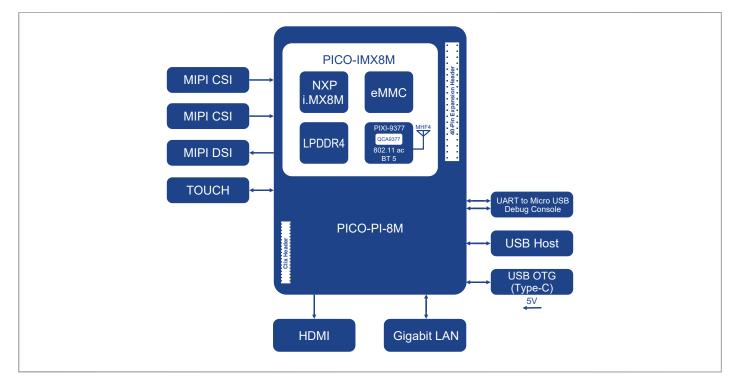
Power Consumption Depending on Configuration

Operation Systems

Standard Support Linux

Yocto Ubuntu Android

Block Diagram



Environmental and Mechanical

Dimensions 85 (W) x 56 (H) x 25 (D) mm

Weight 70 grams

Temperature Commercial: 0° to +50° C

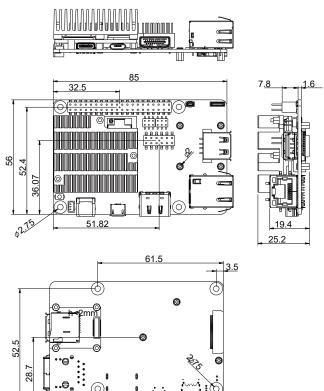
Relative Humidity 10 to 90 % MTBF 50 000 Hours

Shock 15G half-sine 11 ms duration
Vibration 1 Grms random 5-500Hz hr/axis
Certification Compliant with CE / FCC / RoHS /

REACH directives

Dimensions

(units in mm)



Ordering Information

PICO-PI-IMX8M-1G

NXP i.MX8M Quad Development Board with 1GB LPDDR4, 8GB eMMC and Wi-Fi + BT wireless connectivity including antenna and cable set.



PICO-PI-IMX8M-2G

NXP i.MX8M Quad Development Board with 2GB LPDDR4, 8GB eMMC and Wi-Fi + BT wireless connectivity including antenna and cable set.



PICO-PI-IMX8M-4G-DEV

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



2019-05-21 All specifications are subject to change without notice.