Main Features

- TechNexion PICO-WIZARD-IMX8M evaluation kits, based on the ARM Cortex A-53 + M4 architecture, introduce ground-breaking functionality to a wide spectrum of next-generation devices.

- PICO-WIZARD-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 and Yocto.

Specifications

Core System
- Processor: NXP i.MX8M Quad
- Processor Speed: 1.5GHz
- Architecture: ARM Cortex-A53 + M4
- PMIC: ROHM BD71837
- Memory: up to 4GB LPDDR4
- Storage: 16GB eMMC
- Board-to-Board Connector: PICO 70-pin Hirose connectors
- System on Module: PICO SOM
- Debug Interface: UART Interface by Through-hole

Connectivity
- Network LAN: 1x Atheros AR8035 Gigabit LAN
- Wi-Fi/Bluetooth: Qualcomm QCA9377 (optional)
- Antenna: 802.11 a/b/g/n/ac + BT 5 (BR+EDR+BLE)

Expansion Interfaces
- Expansion Slots: 1x M.2 slot
- 1x mini-PCIe

Internal Headers
- Internal Display: MIPI DSI signals on 70-pin Hirose connector
- GPIO
- I²C
- I²S
- PWM
- SPI
- UART
- USB

External Connectors
- External Display: 1x HDMI
- Audio Connectors: CTIA compliant 3.5mm audio jack
- Network: 1x RJ45
- USB: 1x USB 2.0 OTG (Type-C)
- Buttons: 2x USB 2.0 Host
- SIM Cardslot: 1x Reset
- SD Cardslot: 2x Micro-SIM cardslot
- SD Card: 1x microSD card slot

Video
- Graphic Engine: Vivante GC7000Lite
- Video Decode: 4K UltraHD HDR 4Kp60
- Video Encode: H.265 VP9
- Camera: 1080p30 H.264

Audio
- Audio Codec: MIPI CSI (4 lanes)
- Speaker: Cirrus Logic WM8960

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**: 190 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

PICO-WIZARD-IMX8M

NXP i.MX8M 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.