

# PICO-PI-IMX7



## Main Features

- PICO-PI-IMX7 is a highly integrated multi-market applications system with advanced features designed to enable secure and portable applications within the Internet of Things.
- TechNexion PICO-PI-IMX7 platform can be applied in a wide range of applications ranging from simple IoT devices to applications with high level of complexity.



## Specifications

### Core System

Processor	NXP i.MX7 Dual 1GHz
Architecture	ARM Cortex-A7 + M4
PMIC	NXP PF3000
Memory	1GB DDR3L
Storage	eMMC (8GB Default)
Board-to-Board Connector	Edison compatible connector PICO 70-pin Hirose connectors
Debug Interface	Micro USB debug

### Connectivity

Network LAN	Atheros AR8035 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	1x 24-bit TTL RGB signals (expansion header) MIPI CSI+DSI signals on 33-pin FPC connector
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Expansion Headers	GPIO I <sup>2</sup> C I <sup>2</sup> S PWM RS232 SPI USB
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MikroBUS	ADC GPIO I <sup>2</sup> C PWM SPI UART
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### External Connectors

Audio Connectors	CTIA compliant 3.5mm audio jack
Network	1x RJ45
USB	1x USB 2.0 Host 1x USB 2.0 OTG (Type-C)
Buttons	1x Reset

### Video

Graphic Engine	Image re-sizing / rotation / overlay and CSC Pixel Processing Pipeline
Camera	MIPI CSI (2 lanes)

### Audio

Audio Codec Audio Interface	NXP SGT5000 I <sup>2</sup> S (2 channel)
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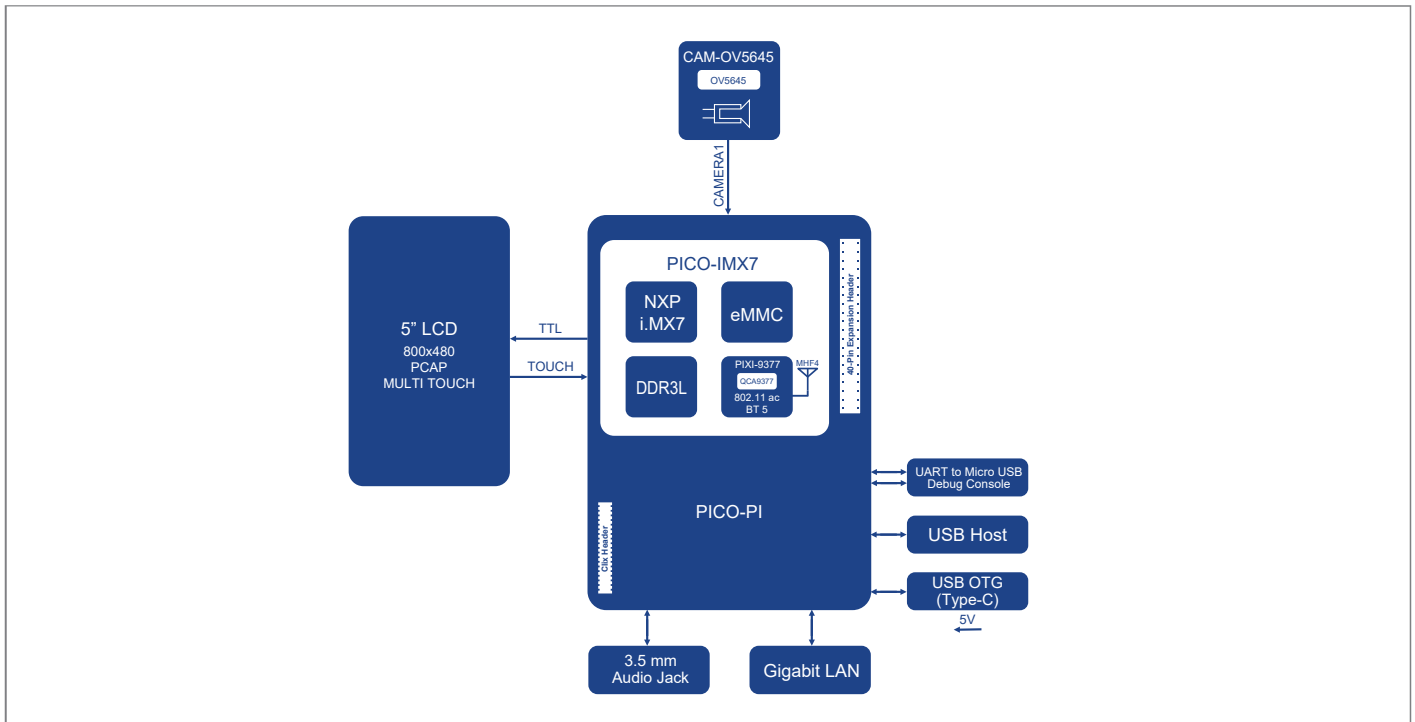
### Power Specifications

Power Input	5V DC +/-5%
Power Connector	USB OTG (Type-C)
Power Consumption	Depending on Configuration

### Operation Systems

Standard Support	Linux Yocto Ubuntu Android
Extended Support	Commercial Linux

## Block Diagram



### Environmental and Mechanical

Dimensions	85.6 x 56.5 x 17.5 mm
Weight	43 grams
Temperature	Commercial: 0° to +60° C
Relative Humidity	10 to 90 %
MTBF	>100 000 Hours
Shock	50G/25ms
Vibration	20G/0-600Hz
Certification	Compliant with CE / FCC / RoHS / REACH directives

### Ordering Information

#### PICO-PI-IMX7-DEV

Development Kit based around NXP i.MX7Dual applications processor including camera module, 5 inch PCAP display, antenna and cable set.



\* Feel free to contact us for customization requests.

### Dimensions

(units in mm)

