

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.
- This developer kit has been qualified and tested by Google to run Android Things at optimal performance.

android
things



yocto
PROJECT



Specifications

Core System

Processor	NXP i.MX7 Dual 1GHz
Architecture	ARM Cortex-A7 + M4
PMIC	NXP PF3000
Memory	512MB DDR3L
Storage	eMMC (4GB 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
WiFi/Bluetooth	Broadcom BCM4339 802.11 a/b/g/n/ac + BT4.1 (BR+EDR+BLE)
Antenna	u.FL connector (optional)

Internal Headers

Internal Display	1x 24-bit TTL RGB signals (expansion header) MIPI CSI+DSI signals on 33-pin FPC connector
Expansion Headers	GPIO I ² C I ² S PWM RS232 SPI USB
MikroBUS	ADC GPIO I ² C PWM SPI UART

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	NXP SGT5000
Audio Interface	I ² S (2 channel)

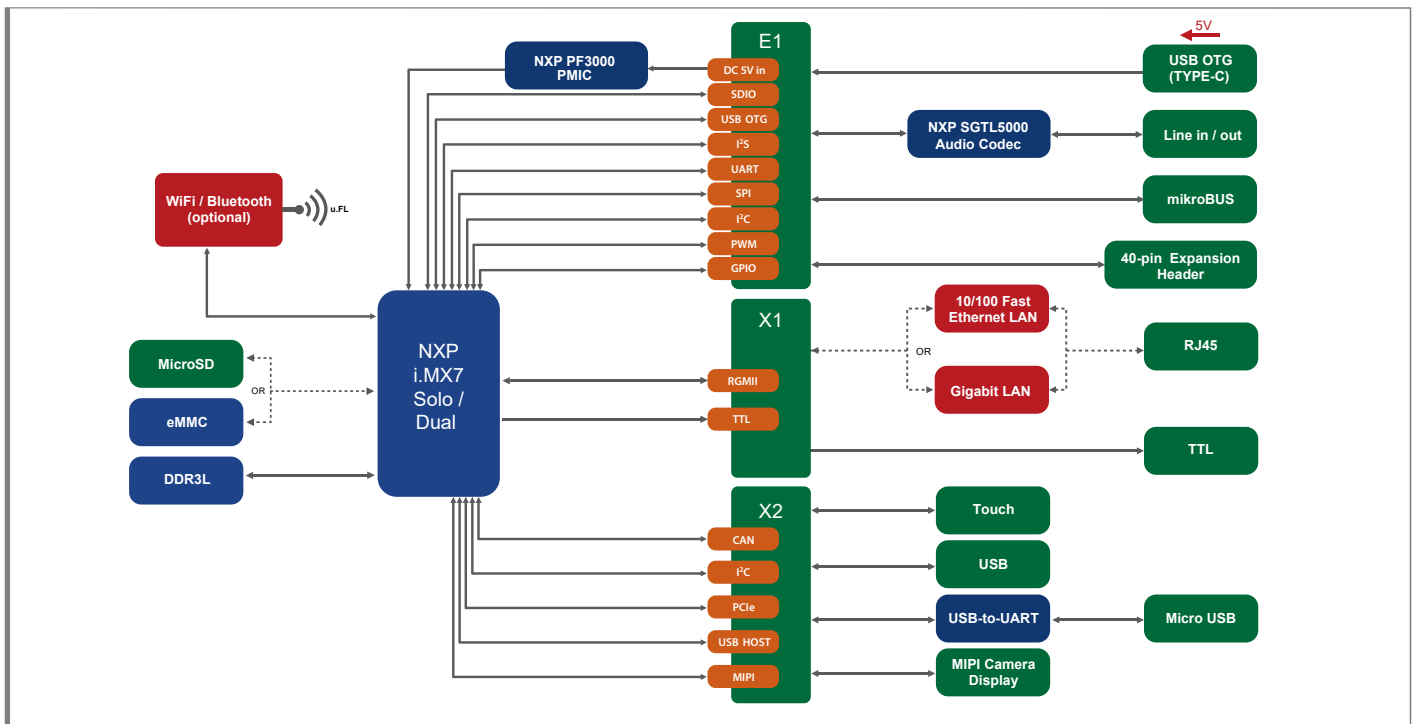
Power Specifications

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

Operation Systems

Standard Support	Android Things 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-XXXXXXXX

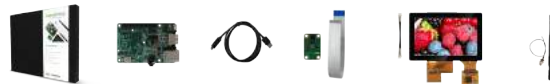
PICO-PI-IMX7

Android Things Development Board based around NXP i.MX7Dual processor.



PICO-PI-IMX7-STARTKIT

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)

