



# ARM IoT specifications

## ARM Internet of Things Gateway

The ARM IoT is specially designed for rugged, industrial environments. It features a fanless design in a miniature (10.8 x 8.3 x 2.4 cm) ruggedized aluminum housing.

The ARM IoT can reliably be operated 24 / 7 making it an ideal to be used for industrial control and monitoring. It features extensive wireless and wired connectivity and can operate in a wide temperature range of -40 °C to 85 °C. When used with a fit-uptime UPS (additional), the ARM IoT can last up to 5 hours in event of a power loss.

### Feature Highlights

- NXP i.MX7 CPU, dual-core Cortex-A7 1 GHz
- Up to 2 GB DDR3 and 32 GB eMMC
- 3G / LTE modem, WiFi a / b / g / n, BT 4.1 and ZigBee
- 2 x 1000 Mbps Ethernet, 4 x USB2, RS485, RS232
- Support for PoE powered mode

### Also available as i.MX7 System-on-Module

- Tiny board computer designed for **custom applications**
- Ideal for cost sensitive and scalable industrial products
- Full design flexibility, scalability and long-term availability

### ARM IoT Specifications

CPU Core	
<b>CPU</b>	NXP i.MX 7Dual ARM Cortex-A7, 1 GHz NEON SIMD and VFPv4
<b>Real-Time Co-Processor</b>	ARM Cortex-M4, 200Mhz

Memory and Storage	
<b>RAM</b>	512 MB – 2 GB, DDR3L - 1066
<b>Storage</b>	eMMC flash, 4 GB - 32 GB Micro-SD socket

Network	
<b>Ethernet</b>	1 x RS485 connector 2 x Gigabit Ethernet ports (POE option available)
<b>Wifi</b>	802.11b/g/n WiFi interface, TI WiLink 8 WL1801 module Dual-band 2x2 802.11a/b/g/n WiFi interface, TI WiLink 8 WL1837 module
<b>Bluetooth</b>	Bluetooth 4.1 BLE TI WiLink 8 WL1837 module
<b>Cellular</b>	3G cellular communication module (via mini-PCie socket) On-board micro-SIM card socket
<b>ZigBee</b>	NXP JN5168 module

Display	
<b>DVI</b>	DVI, up to 1920 x 1080, HDMI connector

Audio	
<b>Analog Audio</b>	Analog audio - stereo line-out, stereo line-in, 3.5 mm jacks

Input / Output	
<b>PCI Express</b>	mini-PCie socket, full-size
<b>USB</b>	4 x USB 2.0 host, type-A connectors
<b>Serial</b>	1 x RS485 / RS422 port, RJ11 connector 1 x RS232 port, ultra-mini serial connector 1 x serial console via UART-to-USB bridge, micro-USB connector
<b>UART</b>	Up-to 1 x UART, embedded I/O header
<b>SPI</b>	Up-to 1 x SPI, embedded I/O header
<b>I2C</b>	Up-to 1 x I2C, embedded I/O header
<b>GPIO</b>	Up-to 12 x GPIOs, embedded I/O header

System	
<b>PoE</b>	Support for PoE (powered device)
<b>RTC</b>	Real time clock operated from on-board coin-cell battery

Electrical	
<b>Supply Voltage</b>	Unregulated 8 V to 24 V
<b>Digital I / O Voltage</b>	3.3 V

Mechanical	
<b>Dimensions</b>	108 x 83 x 24 mm
<b>Enclosure Material</b>	Aluminium housing
<b>Cooling</b>	Passive cooling, fanless design
<b>Weight</b>	450 g

Environmental	
<b>MTTF</b>	> 200 000 hours
<b>Operation Temperature</b>	<b>Commercial:</b> 0° to 70° C <b>Extended:</b> -20° to 70° C <b>Industrial:</b> -40° to 85° C
<b>Storage Temperature</b>	-40° to 85° C
<b>Relative Humidity</b>	10 % to 90 % (operation) 5 % to 95 % (storage)