



U7986-03 Brief Specification



Highlight Features

- Embedded Quad-core ARM® Cortex-A53 MPCore operating at 2.0GHz
- WiFi6 AX6000 platform
- Optional 5G /LTE application
- Optional IOT or Encrypt & Decrypt application
- Industry Aluminium Alloy case

Specifications

Chipset	CPU: MTK MT7986A Quad-core ARM® Cortex-A53 WiFi6: MTK MT7975N+MT7975PN 2x 2.5G PHY: EN8811HN
System Memory	Default DDR4 2Gbyte (Optional 512Mbyte/1Gbyte)
NAND Flash	Default 128Mbyte (Optional 256Mbyte)
EMMC	Optional 8/16Gbyte EMMC
Expansion	1x 5G/4G Module 1x MINIPCI-E for IOT or Encrypt & Decrypt Module
Wireless	MU-MIMO 802.11a/b/g/n/ac/ax WiFi 6 2.4GHz 4T4R 1148Mbps, B mode@22dBm(Max) 5.8GHz 4T4R 4800Mbps, A mode@23dBm(Max)
Bluetooth Module	Support version 5.2
Wired Interface	1x WAN Giga with POE Ethernet RJ45 Port 1x LAN Giga Ethernet RJ45 Port
Reset Button	1x Factory Restore Button (GPIO)
DC Power	1x DC Jack 12V-57V 1x PD (Support 802.3at & af standard)
Power Consumption	24W(Max),12V@2A without Expansion 36W(Max),12V@3A in full range
Software	MTK OpenWrt which includes Uboot, Kernel, Driver and Tool Chain
Environmental	Temperature: Operating: 0°C to 50°C, Storage: -40°C to 90°C Humidity (non-condensing): Operating: 5% to 95%, Storage: Max. 95%
Case	Material: Aluminium Alloy, Dimensions: 220x220x35mm (±2mm)

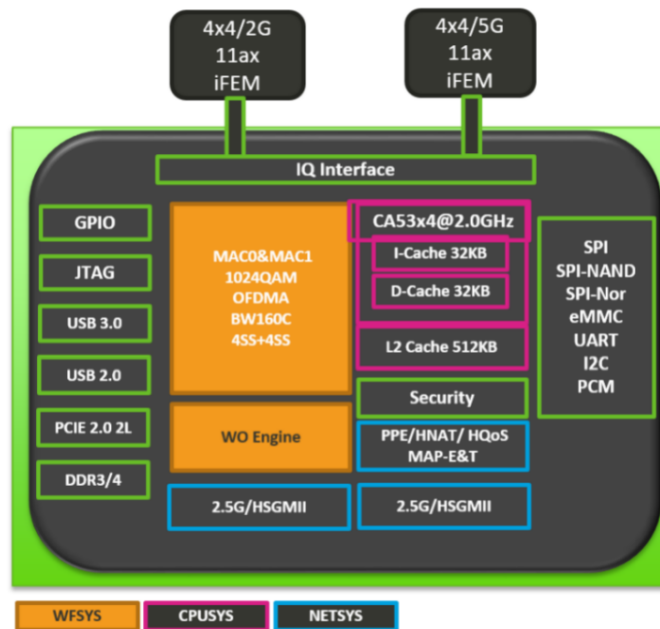


MT7986A Overview and Block Diagram

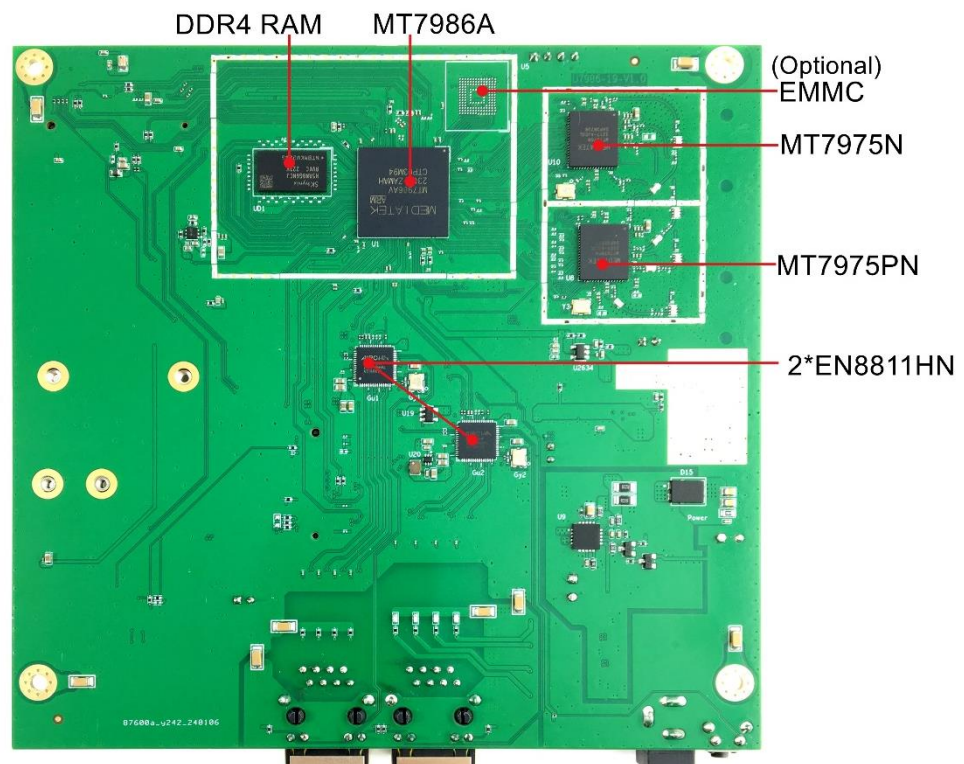
MT7986A is a highly integrated wireless network router system-on-chip used for high wireless performance, home entertainment, and home automation and so on.

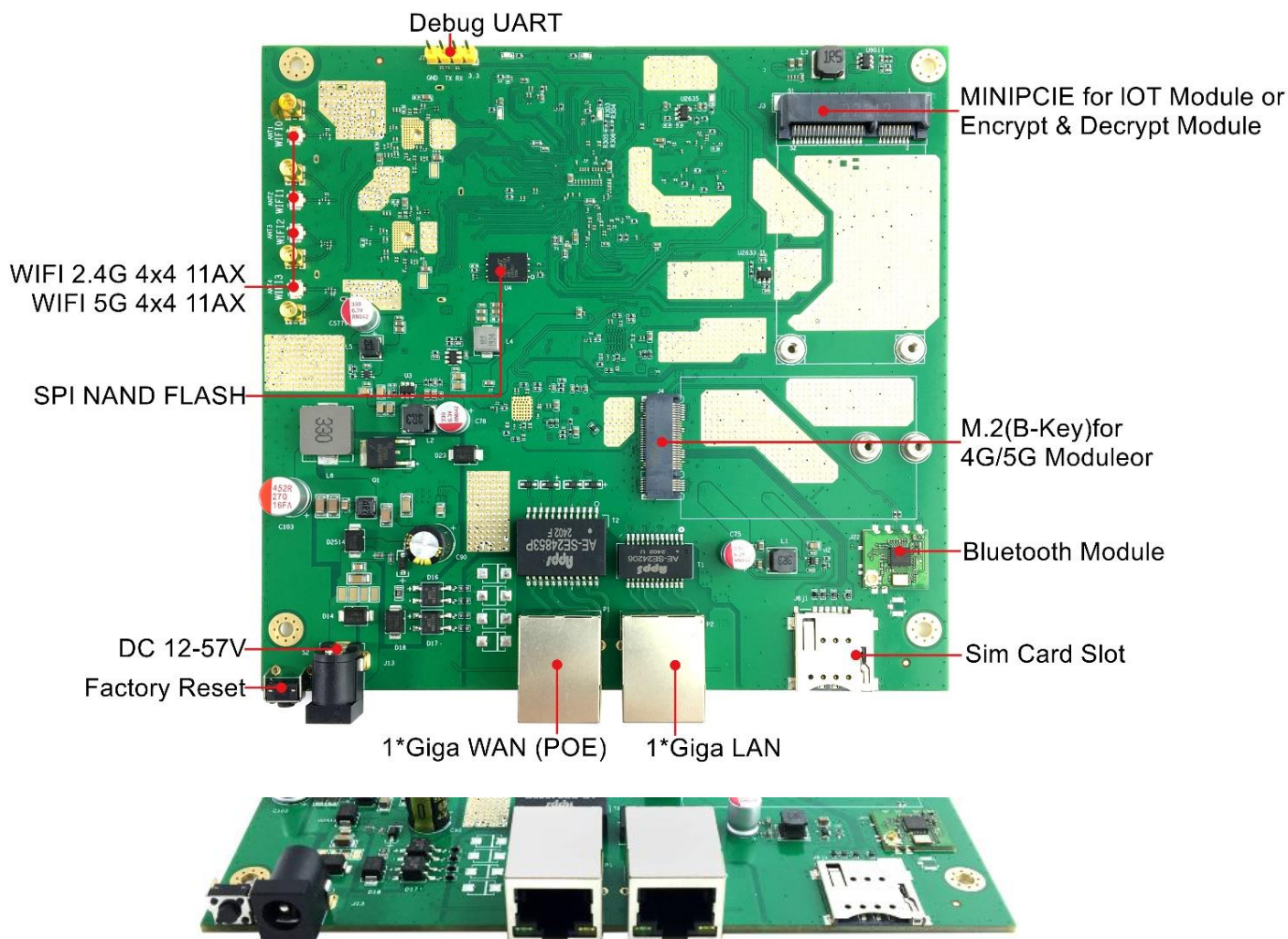
Applications:

- Internet Service Router
- Home Security Gateway
- Wireless Router
- Home Automation
- Wireless Repeater
- NAS Devices

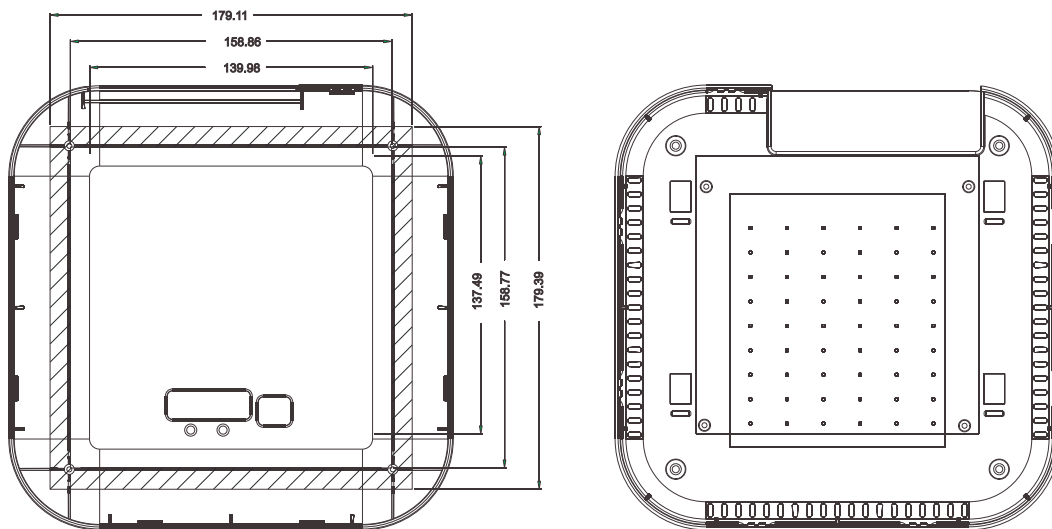


Board Block Diagram





Dimensions





Customization Options

UNITED AIOT have engaged in providing global customers with professional ODM/OEM service of customized stable and cost-effective electronic products. We can customize total production for the customer including Chassis, Hardware, Software and Package as below customization options for this product. Contact us at sales@uiotin.com for more detailed info.

Name	Customization Comments	UNITED AIOT Customization
Memory	Change to 512Mbyte/1Gbyte DDR4	Supported
NAND Flash	Change to 256Mbyte NAND Flash	Supported
EMMC	Change to 8/16Gbyte EMMC	Supported
5G/4G Module	Select the right M2 5G/4G module for your application	Supported
IOT Module or Encrypt & Decrypt Module	Select the right MINIPCIE IOT or Encrypt & Decrypt Module for your application	Supported
Case	Select the different case material for your application	Supported

Ordering Information

Models	Comments
U7986-03	2GByte DDR4 RAM and 128Mbyte NAND Flash

UNITED AIOT Platform Catalog

