



U7986-19 Brief Specification



Highlight Features

- Embedded Quad-core ARM® Cortex-A53 MPCore operating at 2.0GHz
- WiFi6 AX6000 platform
- Optional 5G /LTE or Video compression application
- Optional IOT or Encrypt & Decrypt application
- Optional SPI NAND for low cost and EMMC for big storage application
- Industry iron case with different color support

Specifications

Chipset	CPU: MTK MT7986A Quad-core ARM® Cortex-A53 WiFi6: MTK MT7975N+MT7975PN 5 Giga-PORT Switch: MTK MT7531AE
System Memory	Default DDR4 2Gbyte (Optional 512Mbyte/1Gbyte)
EMMC	Default 16Gbyte (Optional 8Gbyte EMMC)
Nor Flash	Default 16Mbyte Nor Flash for ESP32
NAND Flash	Optional 128/256Mbyte NAND Flash
Expansion	1x 5G/4G or Video compression Module 1x MINIPCIE for IOT or Encrypt & Decrypt Module 1x FPC Connect to Screen 1x RS485 with Isolators, 1xRS232/GPIO connector
Screen	3.95 inch, 84x84mm
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 2.5G WAN+4x Giga LAN
Reset Button	1x Factory Restore Button (GPIO)
DC Power	1x DC Jack Connector (Default 52V@2A Max)
Power Consumption	24W(Max),52V@0.5A without Expansion 36W(Max),52V@0.7A 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: Iron, Dimensions: 180x127x37mm

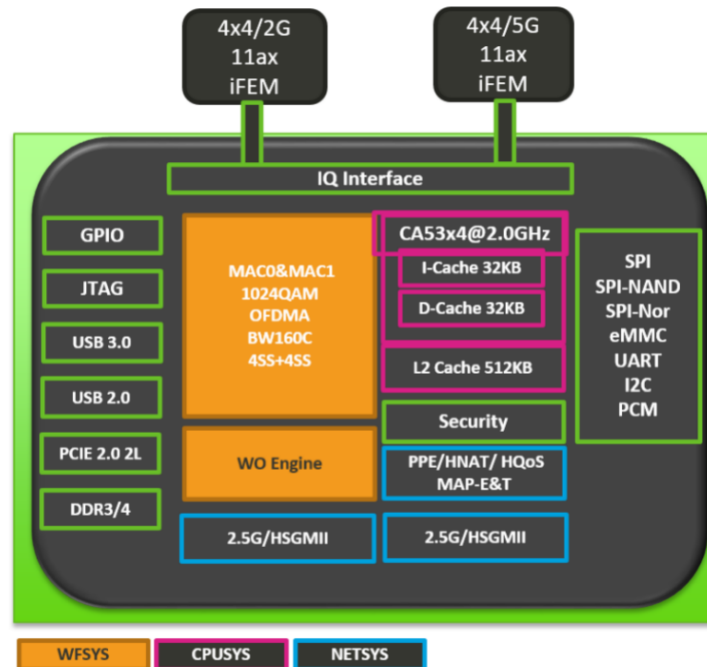


MT7986A Overview and Block Diagram

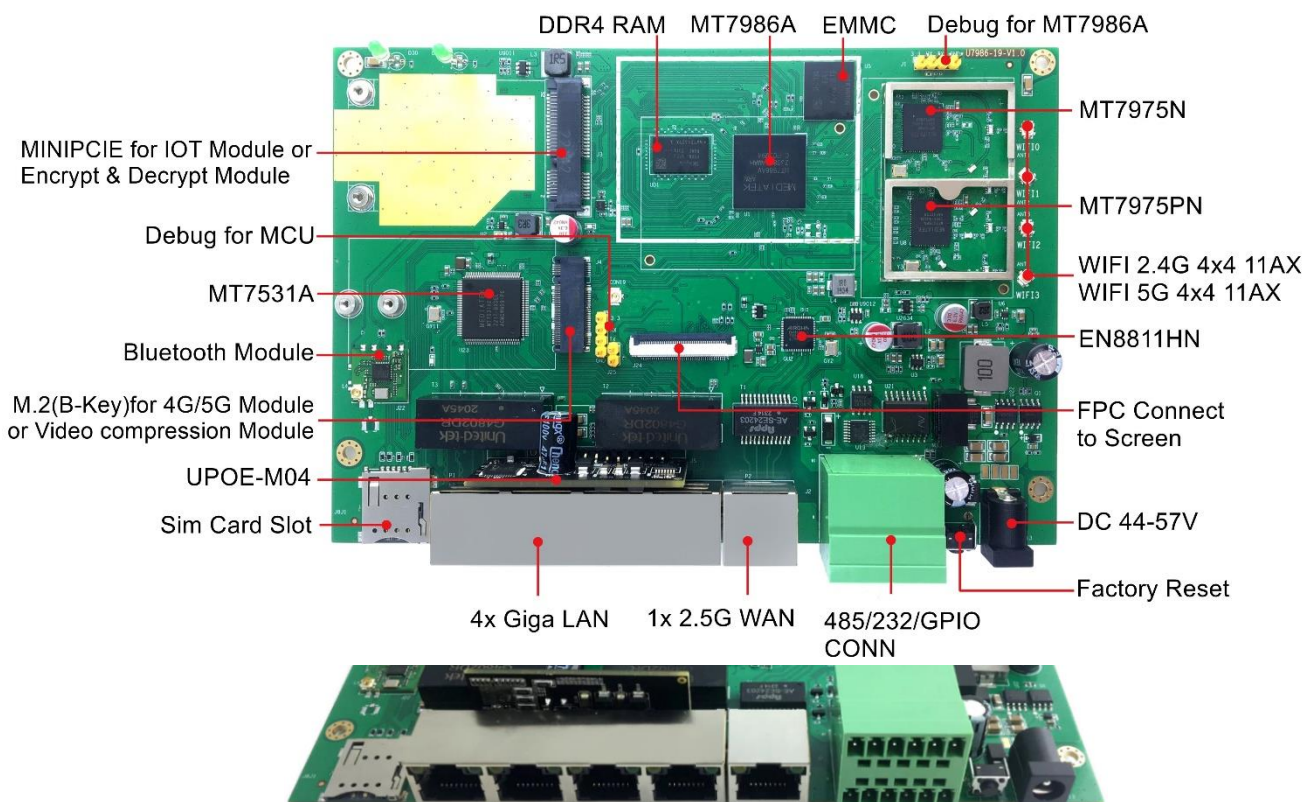
MT7986A is a highly integrated wireless network router system-on-chip used for high wireless performance, home entertainment, and home automation and so on.

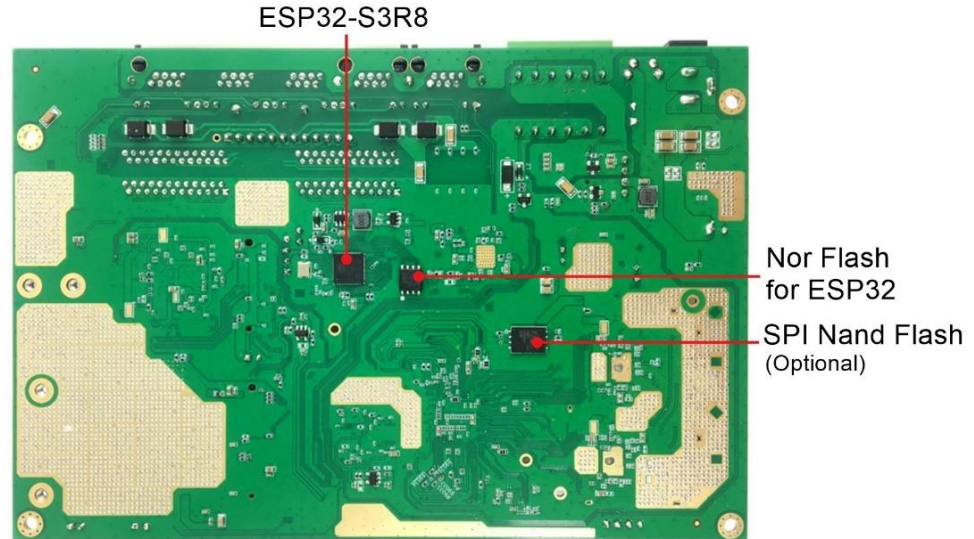
Applications:

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



Board Block Diagram





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 8Gbyte EMMC	Supported
5G/4G Module or Video compression Module	Select the right M2 5G/4G module or Video compression 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 Select Industry Iron case with different color	Supported

Ordering Information

Models	Comments
U7986-19	2GByte DDR4 RAM and 16GByte EMMC



UNITED AIOT Platform Catalog

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