U7986-06 Brief Specification

Highlight Features

- Embedded Quad-core ARM® Cortex-A53 MPCore operating at 2.0GHz
- WiFi6 AX6000 platform
- Optional SPI NAND for low cost and EMMC for big storage application
- Optional 5G /LTE application
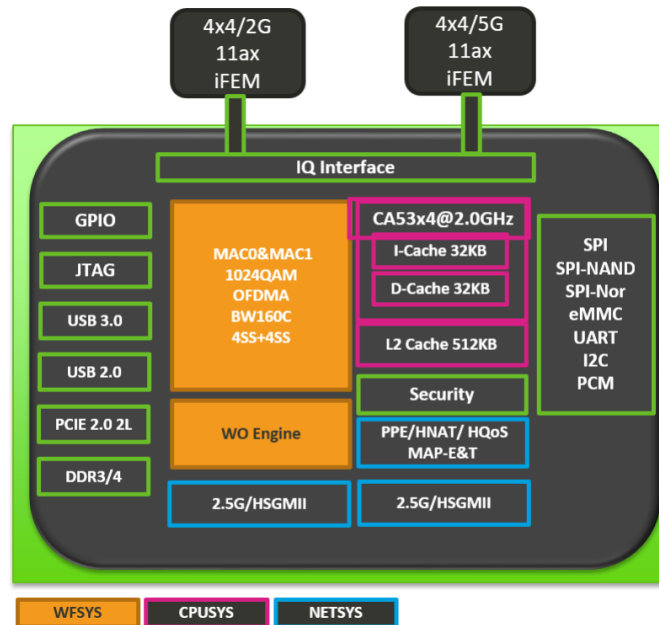- Aluminum Alloy case with different color support and removable SMA antennas

Specifications

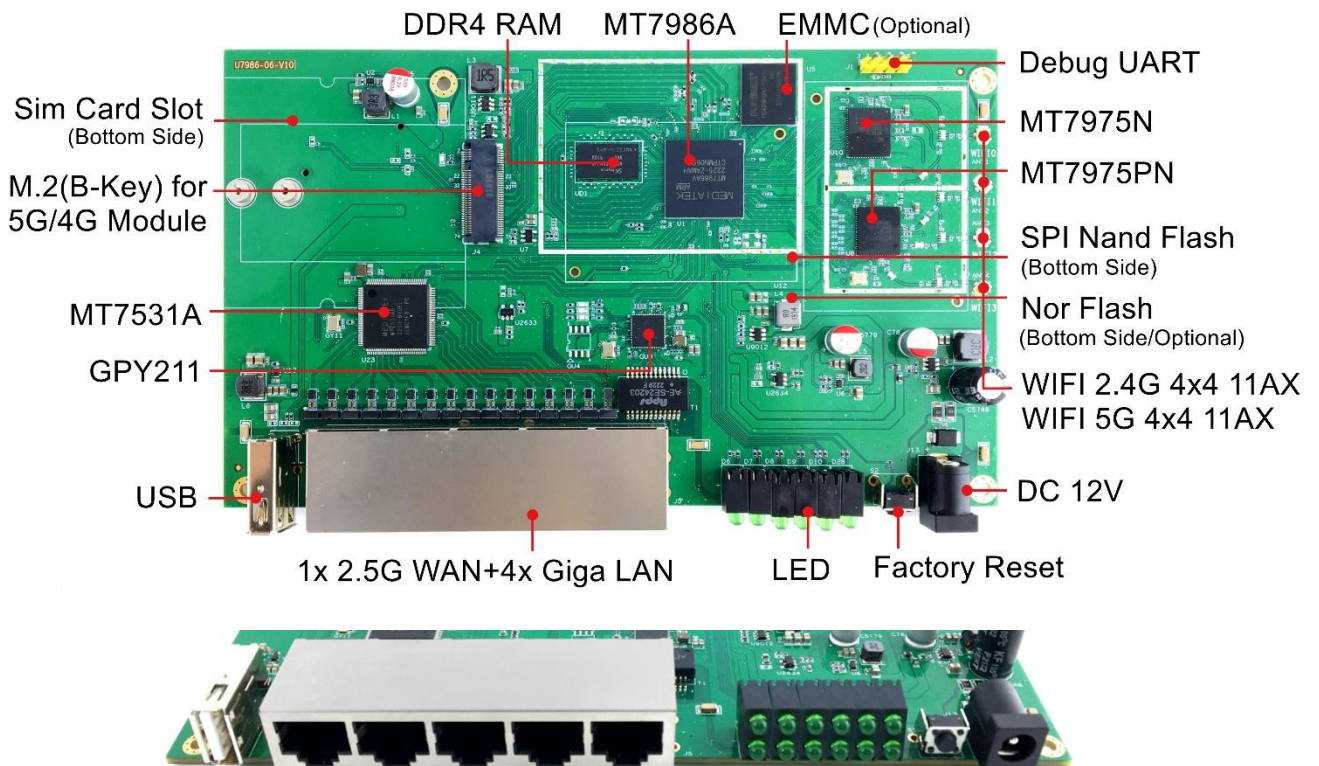| Chipset	CPU: MTK MT7986A Quad-core ARM® Cortex-A53
	WiFi6: MTK MT7975N+MT7975PN
	5 Giga-PORT Switch: MTK MT7531AE
System Memory	Default DDR4 1Gbyte (Optional 512Mbyte/2Gbyte)
NAND Flash	Default 128Mbyte (Optional 256Mbyte NAND Flash)
EMMC	Optional 8Gbyte EMMC
Nor Flash	Optional 8/16/32/64Mbyte Nor Flash
Expansion	1x 5G/4G Module with a SIM card
	1x USB2.0 TYPE A connector
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)
Wired Interface	1x 2.5G WAN+4x Giga LAN
Reset Button	1x Factory Restore Button (GPIO)
DC Power	1x DC Jack Connector (Default 12V@2A)
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: 0ºC to 50ºC, Storage: -40ºC to 90ºC
	Humidity (non-condensing): Operating: 5% to 95%, Storage: Max. 95%
Case	**Material:** Aluminum Alloy, **Dimensions:** 189x129x25 mm

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.
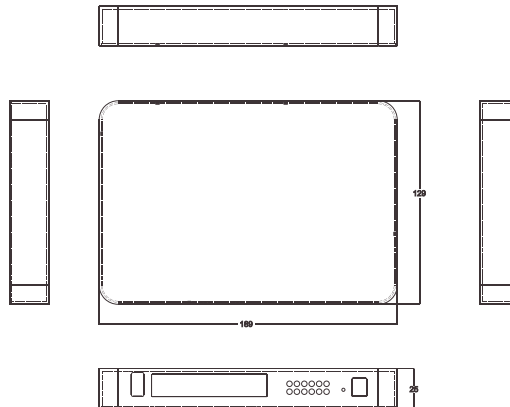
Applications:

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

Board Block Diagram

Dimensions

Customization Options

UniElec 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@unielecinc.com for more detailed info.

Name	Customization Comments	UniElec Customization
Memory	Change to 512Mbyte/2Gbyte DDR4 Change to 256Mbyte/512Mbyte DDR3	Supported
NAND Flash	Change to 256Mbyte NAND Flash	Supported
EMMC	Change to 8Gbyte EMMC	Supported
Nor Flash	Change to 8/16/32/64Mbyte	Supported
5G/4G Module	Select the right M2 5G/4G module for your application	Supported
Case	Select the different case material for your application Select Aluminum Alloy case with different color	Supported

Ordering Information

Models	Comments
U7986-06	128Mbyte NAND Flash and 1Gbyte DDR4 RAM

UniElec Platform Catalog

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