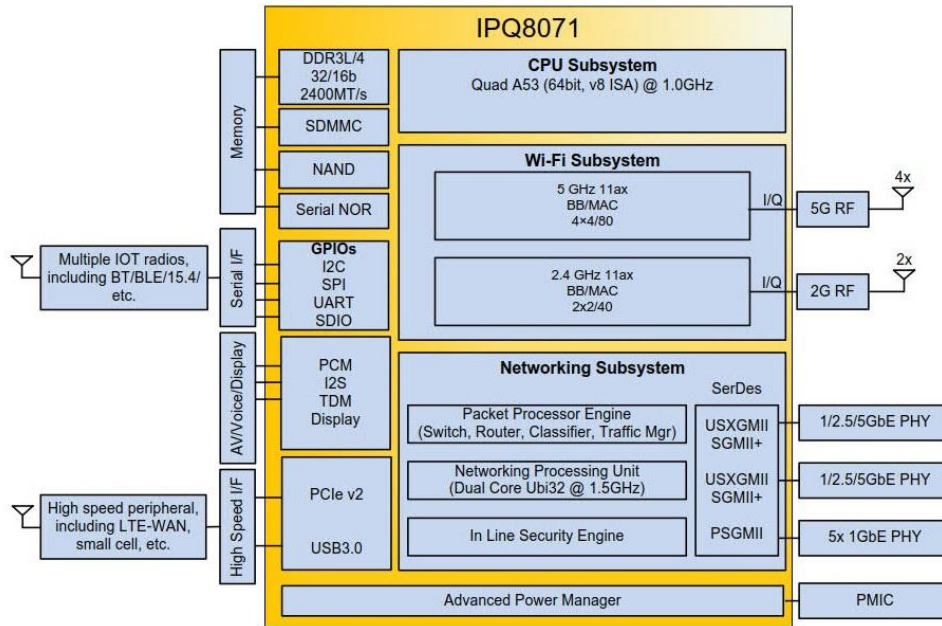# U8071-36 Brief Specification

Highlight Features

- Quad ARM Cortex A53s @ 1.0 GHz
- WIFI6 AX3000 platform
- Industry Aluminium Alloy case
- Product data processing is faster and more stable
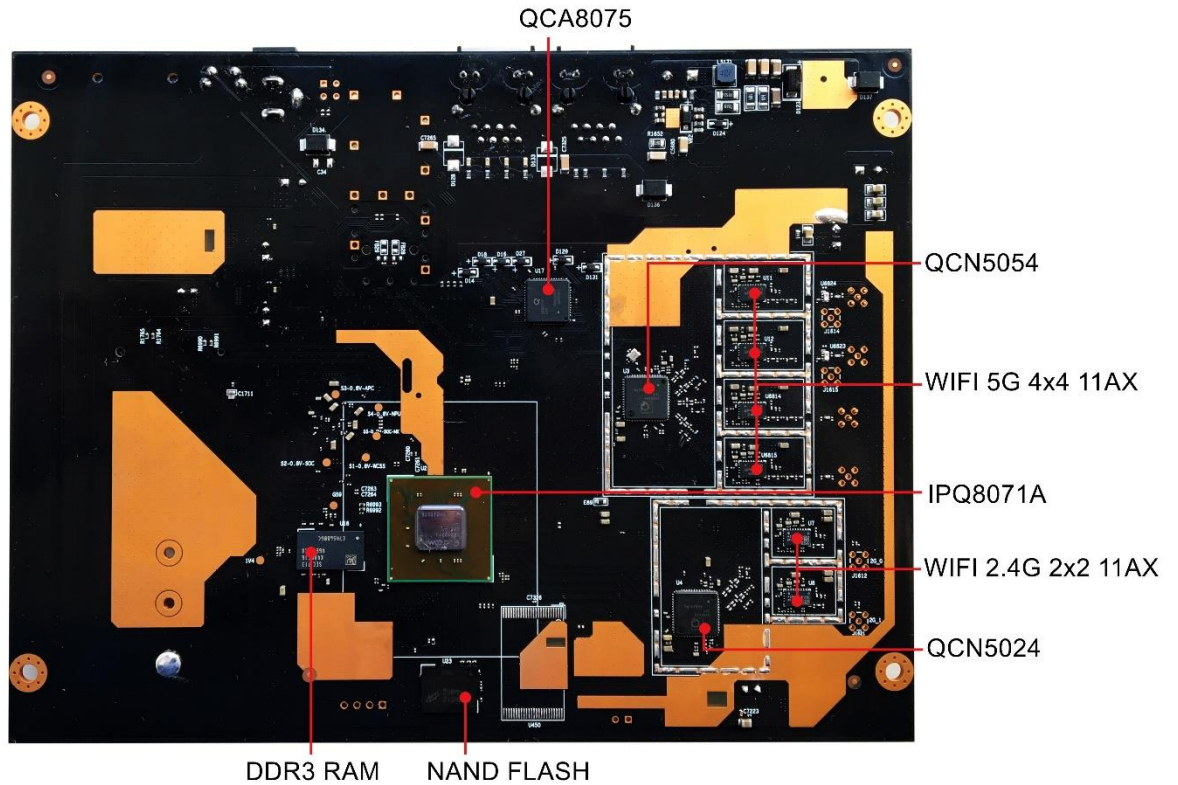
Specifications

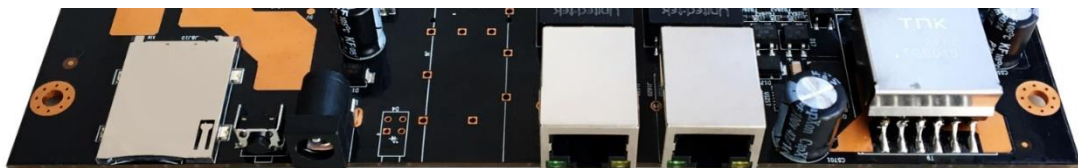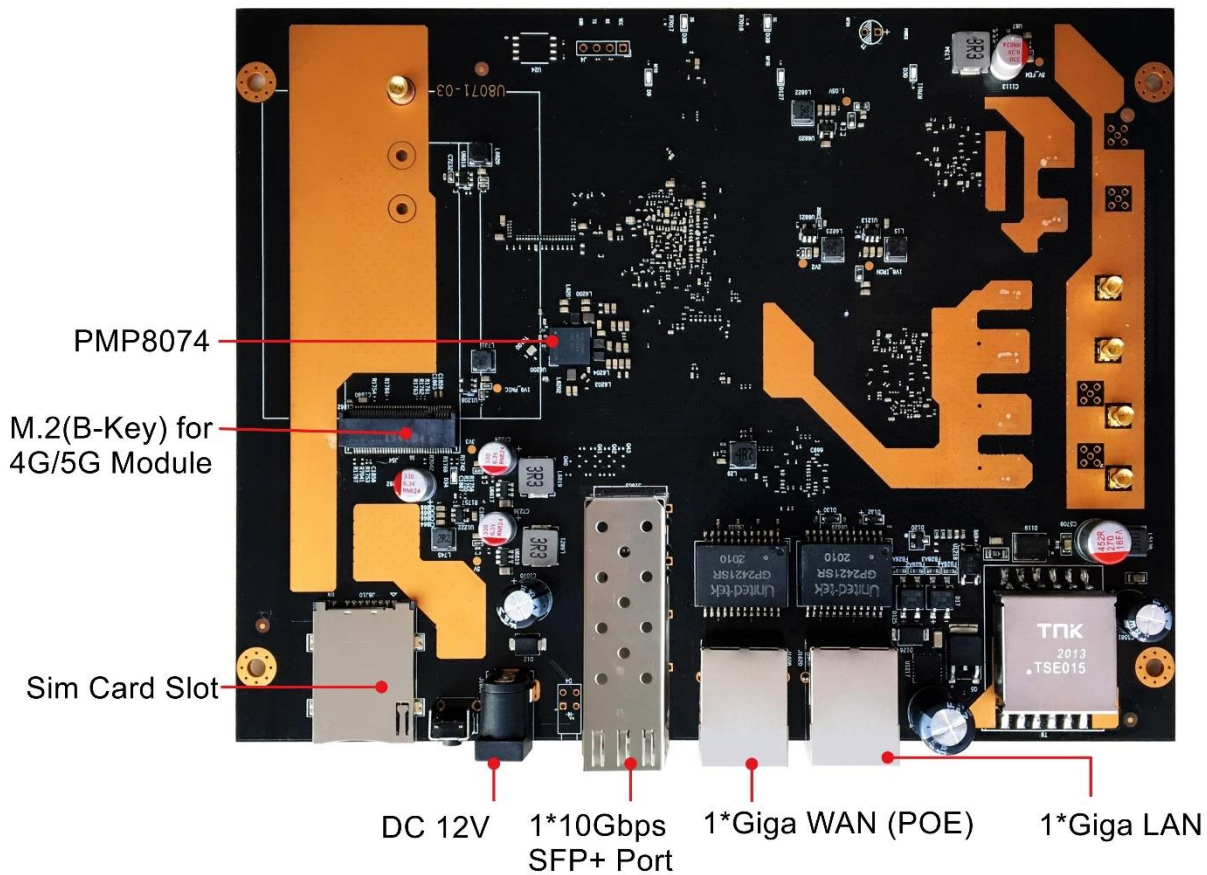| Chipset	CPU: Qualcomm IPQ8071(Optional IPQ8072/IPQ8070)
	2.4GHz AX Chip: Qualcomm 2X2; SINGLE-BAND; 802.11AX QCN5024
	5GHz AX Chip: Qualcomm 4X4; SINGLE-BAND; 802.11AX QCN5054
	Ethernet 5 Giga port switch: Qualcomm QCA8075
	Power management: PMP8074
System Memory	Default DDR3-2400 512Mbyte (Optional 256Mbyte)
NAND Flash	Default NAND Flash 256Mbyte (Optional 128Mbyte)
Expansion	1x 5G/LTE Module with a SIM card
	1x 10G SFP Slot
Wireless	MU-MIMO 802.11a/b/g/n/ac/ax WiFi 6
	2.4GHz 2T2R 600Mbps, B mode@25dBm(Max)
	5.8GHz 4T4R 2400Mbps, A mode@24dBm(Max)
Wired Interface	1* WAN Giga with POE PD 25W Support (802.3at & af standard)
	1* LAN Giga Ethernet RJ45 Port
Reset Button	1x Factory Restore Button (GPIO)
DC Power	1x DC Jack Connector (Default 12V@2A)
Power Consumption	20W(Max), 12V@2A in full range
Software	Qualcomm QSDK which includes Uboot, Kernel 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:** Aluminium Alloy, **Dimensions:** 304*184*88mm

IPQ8071 Block Diagram

IPQ8071

Memory			
DDR3L/4 32/16b 2400MT/s		**CPU Subsystem** Quad A53 (64bit, v8 ISA) @ 1.0GHz	
SDMMC			
NAND		**Wi-Fi Subsystem**	
Serial NOR		5 GHz 11ax BB/MAC 4×4/80	I/Q — 5G RF — 4x

Serial I/F
Multiple IOT radios, including BT/BLE/15.4/ etc.

GPIOs
I2C
SPI
UART
SDIO

2.4 GHz 11ax BB/MAC 2x2/40 — I/Q — 2G RF — 2x

AV/Voice/Display
PCM
I2S
TDM
Display

Networking Subsystem
SerDes

Packet Processor Engine (Switch, Router, Classifier, Traffic Mgr) — USXGMII SGMII+ — 1/2.5/5GbE PHY

Networking Processing Unit (Dual Core Ubi32 @ 1.5GHz) — USXGMII SGMII+ — 1/2.5/5GbE PHY

High Speed I/F
High speed peripheral, including LTE-WAN, small cell, etc.

PCIe v2

USB3.0

In Line Security Engine — PSGMII — 5x 1GbE PHY

Advanced Power Manager — PMIC

Board Block Diagram

QCA8075
QCN5054
WIFI 5G 4x4 11AX
IPQ8071A
WIFI 2.4G 2x2 11AX
QCN5024
DDR3 RAM   NAND FLASH

PMP8074

M.2(B-Key) for
4G/5G Module

Sim Card Slot

DC 12V 1*10Gbps 1*Giga WAN (POE) 1*Giga LAN
SFP+ Port

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 256Mbyte DDR3	Supported
Nand Flash	Change to 128Mbyte NAND	Supported
5G/LTE Module	Select the right M2 5G/LTE module for your application	Supported
Case	Select the different case material for your application	Supported

Ordering Information

Models	Comments
U8071-36	256Mbyte NAND Flash and 512Mbyte DDR3 RAM

UNITED AIOT Platform Catalog

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