



DR8074A(HK01)

2x(4x4) or 8x8 11AX MU-MIMO DUAL CONCURRENT EMBEDDED BOARD

Features

- Qualcomm Atheros IPQ8074A AR Quad Core CPU
- On-board 5GHz radio, up to 4804Mbps physical data rate 32MB NOR Flash, 256MB NAND Flash
- On-board 2.4GHz radio, up to 1147Mbps physical data rate
- Support 11ax TX Beamforming
- Support 11ac/ax MU-MIMO DL and UL
- Support OFDMA DL and UL
- Tri-band support with 5G SBS (4x4/5GHz + 4x4/5GHz) + 4x4/2.4GHz
- Supports Dynamic Frequency Selection (DFS)

Applications

- Dual Band MU-MIMO 802.11g/n/ac/ax
- Access Point Wireless application
- 8x8 MU-MIMO 802.11ac Access Point

Product Description

DR8074A(HK01) based on IPQ8074A chipset is an enterprise wireless module integrated with 2x2(4x4) or 8x8 5G high power Radio module and 4x4 2.4G high power Radio module designed specifically to provide users with mobile access to high-bandwidth video streaming, voice, and data transmission for office and challenging RF environment in factories, warehouses establishment.

Absolute Maximum Rating

Parameter	Rating	Unit
Operating Temperature Range	-20 to +70	°C
Storage Temperature Range	-40 to +90	°C
Operating Humidity Range	5 to +95 (non-condensing)	%
Storage Humidity Range	0 to +90 (non-condensing)	%

Hardware Specifications

Symbol	Parameter
CPU	Qualcomm Atheros Quad Core ARM Cortex 64-bit A53 Processor IPQ8074A 2.2GHz CPU
CPU Frequency	Derived from Qualcomm Atheros AP.HK01
System Memory	1GB (2x 512MB) DDR3L 32-bit interface
Frequency Range	2.412GHz to 2.472GHz, 5.150GHz to 5.825GHz
Modulation Techniques	OFDMA: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM
NGFF Slot for 5G Module	M.2 (NGFF) "B Key" Socket with PCIe 3.0 interface
Optional Onboard Modules	Supports 1x BT module, 1x ZigBee module, 1x Touch pad connector, 1x Audio header, 1xLCD display header
Flash	NOR Flash: 32MB NAND Flash: 256MB eMMC: 8GB
Wireless	On-board 4x4 2.4GHz MU-MIMO 802.11b/g/n/ax, max TBDdBm per chain On-board 2x(4x4) or 8x8 5GHz MU-MIMO 802.11a/n/ac/ax, max TBDdBm per chain 12x U.FL connectors
Reset Buttons	2x Hardware reset button, 1x WPS reset button
DC Jack Input	1x DC Jack Connector: 12V, 5A
Interface	5x Gigabit Ethernet (1GbE) LAN/WAN RJ45 Port (Auto MDI-X) 1x 10Gigabit Ethernet (10GbE) LAN/WAN RJ45 Port (Auto MDI-X) 1x SFP+ Port 2x USB 3.0 Port 1x Serial Port 12 Pin Connector 1x JTAG 20 Pin Connector 1x micro SD Card Socket 1x M.2 Slot
LED	13x LED indicators, 2 additional LED on Ethernet port
Power Consumption	TBD