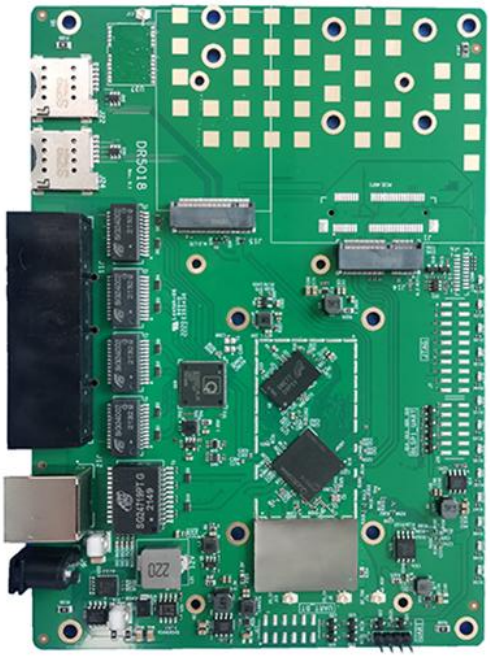
Features

- Dual-core ARM 64bit A53@1.0GHz Processor
- 512M DDRL3L System Memory
- 8MB NOR Flash, 128MB NAND Flash
- 2x2 On-board 2.4GHz radio, up to 573Mbps physical Data Rate
- M.2 Card Slot for 5G(QUECTEL RM500Q-GL)
- M.2 Card Slot for QCN9074 WIFI6E Card



Applications

- 802.11ax MU-MIMO OFDMA Access Point
- Mesh router Supporting Easy Mesh Hotel Wireless
- Smart AP TWT

Product Description

DR5018 based on IPQ5018 chipset is an enterprise wireless module integrated with BT5.1 Radio module and 2x2 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	-40 ~ 70	°C
Storage Temperature Range	-45 ~ 105	°C
Operating Humidity Range	5 ~ 95 (non-condensing)	%
Storage Humidity Range	0 ~ 90 (non-condensing)	%

Hardware Specifications

Symbol	Parameter
CPU	Qualcomm-Atheros IPQ5018
CPU Frequency	Dual-core ARM 64 bit A53 @ 1.0 GHz processor
System Memory	512MB DDR3L 16-bit interface with 32-bit memory bus design It can support 1G (optional)
Ethernet Port	4 x 1Gbps Ethernet Ports 1 x 1Gbps Ethernet Ports
NGFF Slot	M.2 Card Slot for 5G(QUECTEL RM500Q-GL) M.2 Card Slot for QCN9074 WIFI6/6E Card or QCN6102/QCN6122 WIFI6/6E Card
POE	Support
DC Jack	12V power supply
LED header	LED for power,WiFi strength
Serial Port	Support
Wireless	On-board 802.11 b/g/n/ax 2x2 MU-MIMO OFDMA 2.4GHz, max 23dBm per chain (2 IPEX Connectors)
Bluetooth (optional)	BT5.1
Nor Flash	8 MB
Nand Flash	128 MB
DDR	512 MB
Dimension	170mm x 120mm x 15mm

Radio TX Specifications (2412MHz-2482MHz)

Operating Mode	Data Rate	Power		Tolerance
		1 Chain	2 Chains	
2.4Ghz 802.11ax HE20	MCS0	23dbm	26dbm	±2dB
	MCS1	23dbm	26dbm	±2dB
	MCS2	23dbm	26dbm	±2dB
	MCS3	23dbm	26dbm	±2dB
	MCS4	23dbm	26dbm	±2dB
	MCS5	23dbm	26dbm	±2dB
	MCS6	23dBm	26dBm	±2dB
	MCS7	22dBm	25dBm	±2dB
	MCS8	21dBm	24dBm	±2dB
	MCS9	21dBm	24dBm	±2dB
	MCS10	18dBm	21dBm	±2dB
	MCS11	17dbm	20dbm	±2dB
2.4Ghz 802.11ax HE40	MCS0	23dbm	26dbm	±2dB
	MCS1	23dbm	26dbm	±2dB
	MCS2	23dbm	26dbm	±2dB
	MCS3	23dbm	26dbm	±2dB
	MCS4	23dbm	26dbm	±2dB
	MCS5	23dbm	26dbm	±2dB
	MCS6	23dbm	26dbm	±2dB
	MCS7	22dBm	25dBm	±2dB
	MCS8	21dBm	24dBm	±2dB
	MCS9	21dBm	24dBm	±2dB
	MCS10	21dBm	24dBm	±2dB
	MCS11	19dbm	22dbm	±2dB

Radio RX Specifications (2412MHz-2482MHz)

Operating Mode	Data Rate	RX Sensitivity	Tolerance
2.4Ghz 802.11b	1Mbps	-98	±2dB
	2Mbps	-95	±2dB
	5.5Mbps	-92	±2dB
	11Mbps	-92	±2dB
2.4Ghz 802.11g	6Mbps	-94	±2dB
	54Mbps	-80	±2dB
2.4Ghz 802.11n/ac VHT20	MCS0	-92	±2dB
	MCS7	-75	±2dB
2.4Ghz 802.11n/ac VHT40	MCS0	-90	±2dB
	MCS7	-70	±2dB
2.4Ghz 802.11ax HE20	MCS0	-92	±2dB
	MCS8	-74	±2dB
	MCS9	-72	±2dB
	MCS10	-69	±2dB
	MCS11	-64	±2dB
2.4Ghz 802.11ax HE40	MCS0	-89	±2dB
	MCS8	-72	±2dB
	MCS9	-69	±2dB
	MCS10	-66	±2dB
	MCS11	-61	±2dB

Block diagram