

CMP9702

Wi-Fi 7 + Bluetooth 5.4 M.2 2230 2x2 Module

Tri-Band Simultaneous (DBS/HBS)



- 2x2 Wi-Fi 7 + BT 5.4
- M.2 2230 E-Key
- 22 × 30 × 1.9 mm
- MHF4 × 2 (2T2R)

The CMP9702 is a highly integrated Wi-Fi 7 and Bluetooth 5.4 wireless module built on the Qualcomm WCN7851-5. It delivers 2x2 tri-band connectivity with simultaneous operation (DBS / HBS) across 2.4 GHz + 5/6 GHz band combinations, in an M.2 2230 E-Key form factor.

WIRELESS FEATURES

- Compliant with IEEE 802.11a/b/g/n/ac/ax/be
- Multi-Link Operation (MLO)
- 2x2 MU-MIMO with DL/UL OFDMA
- Tri-band 2.4 / 5 / 6 GHz; up to 4096-QAM
- Bandwidth: 40 MHz (2.4G) · 160 MHz (5G) · 320 MHz (6G)
- DBS: 2.4G 2x2 + 5/6G 2x2 160 MHz
- HBS: 5/6G 2x2 160 MHz + 5/6G 2x2 160 MHz
- Up to 5.8 Gbps PHY data rate
- DFS radar detection
- Bluetooth 5.4 (BR/EDR + LE), backward compatible; ANT+

PROTOCOL & INTERFACE

- PCIe Gen 3 2-lane interface for WLAN
- USB 1.1 interface for Bluetooth
- Antenna: MHF4 (compatible) connector ×2 for 2T2R
- Operating temp: -40°C to +85°C
- Supply: DC 3.3V ±5%

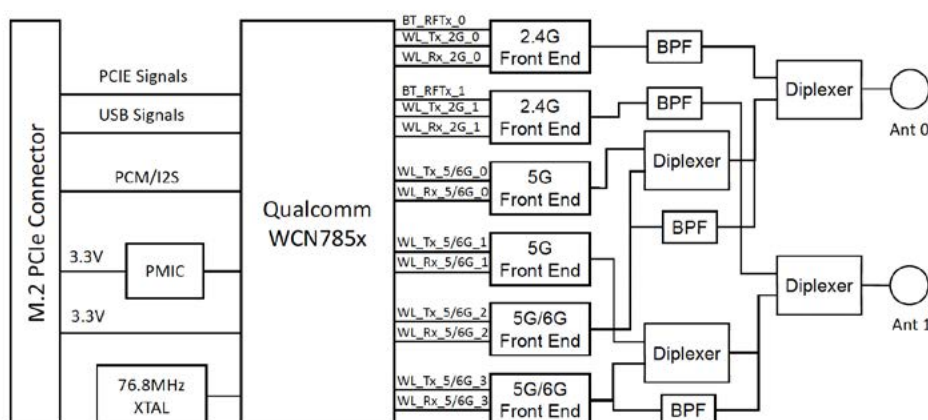
SOFTWARE & DRIVER

- Windows 10 / 11 (32-bit / 64-bit)
- Linux: QCA Standard LEA; open-source ATH12K
- Platforms: Intel x86 (verified), ARM / MIPS

APPLICATIONS

- Industrial networks & IoT gateways
- Medical & healthcare devices
- POS terminals
- Building & factory automation
- Security, video & cameras
- Portable computing & printing

BLOCK DIAGRAM



SECURITY

- WPA3, WPA2, WPA2-WPA mixed mode, AES

CERTIFICATION

- CE / FCC / IC / NCC / Japan