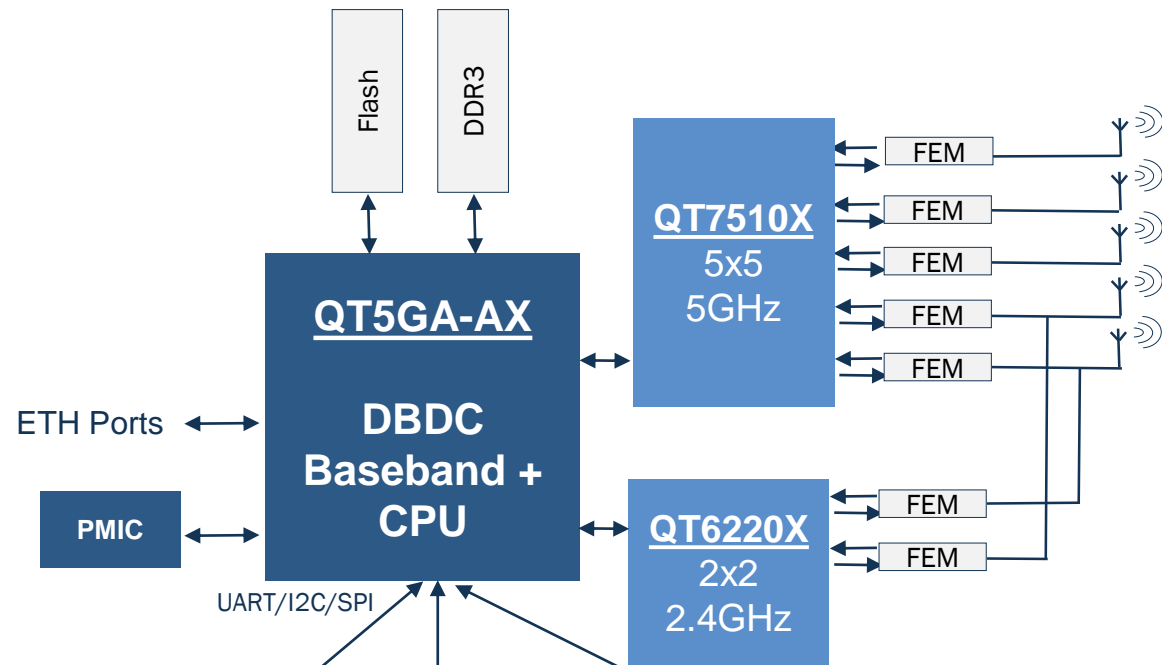# Spartan 5XL

Spartan by Quantenna Connectivity Solutions

1. Advanced Reference Design: A Near Turnkey Set of Hardware Deliverables

2. Product Design Files Available to OEM & ODM Under License

3. Reduces OEM & ODM Development Cycle

4. Original Product Design Quality Guaranteed by QCS

Spartan 5XL IOT – Key Features

Spartan Product Name	Spartan 5XL
Quantenna Chipset	QSR5GA-AX
Wi-Fi Generation	Wi-Fi 6 Certified
AP / Repeater Type	Dual-Band / Half-Duplex
MIMO Order & Bandwidth	5x5 @5GHz – 160MHz 2x2 @2.4GHz – 40MHz
Wi-Fi AP TCP Capacity	> 3Gbps
LAN Interfaces	2 Ethernet Ports 1x 2.5GE + 1x 1GE
IOT Radio Hosting	BLE, Zigbee, Sub-1GHz

ON

Spartan 5XL IOT - Architecture

1. **Higher Speed and Range**

2. **Better MU-MIMO than 4x4 or lower solutions**

3. **Industry best DFS**

4. **Optimal for AP/Repeaters**

5. **Connectivity for optional external IoT radios**

A Variety Of IoT Modules Are Available From ON Semiconductor

- 802.15.4 module for Zigbee application - NCAT00LKT002G4
  - https://www.onsemi.com/products/connectivity/wireless-rf-transceivers/ncat00lkt002g4
  - M3 Core, 640k Flash, 48k RAM
  - Whole Zigbee stack running on the module

- Sub GHz (27-1050MHz) - AXM0F243
  - https://www.onsemi.com/products/connectivity/wireless-rf-transceivers/axm0f243
  - M0 Core, 64k Flash, 8k SRAM

- BLE - RSL10 SIP
  - https://www.onsemi.com/products/connectivity/wireless-rf-transceivers/rsl10-sip
  - M3 Core, audio LPDSP, 384k flash, 72k RAM