Qualcomm



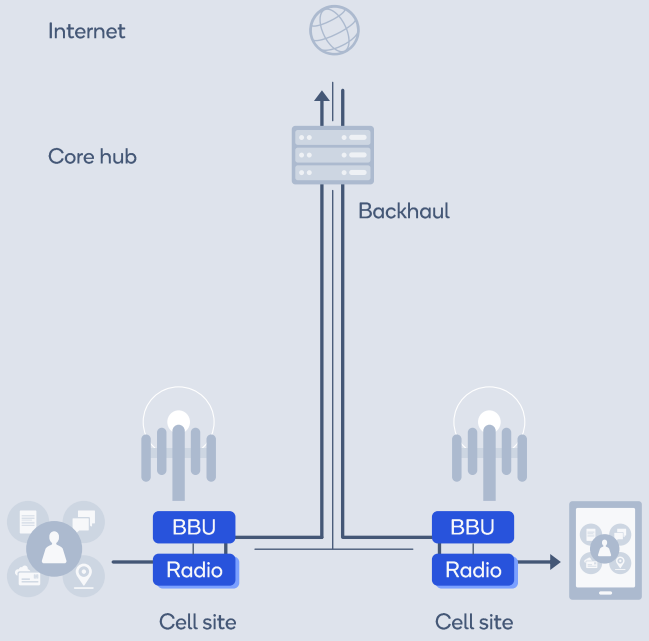
The Modern Network:

Open & Virtualized RAN

Evolving the 5G network

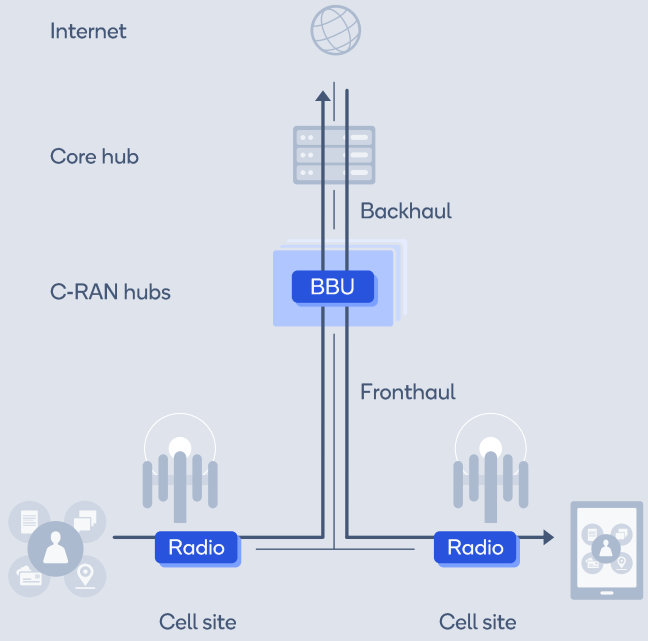
Traditional RAN

Combined baseband processing unit + Radio unit



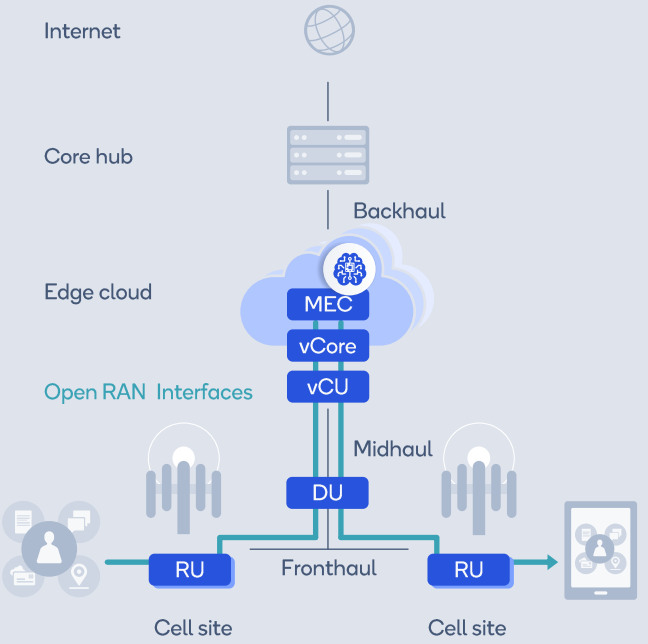
Centralized RAN (C-RAN)

Centralized baseband processing unit



Open vRAN

Virtualized baseband processing unit with disaggregation



For better coordination, scalable capacity, faster deployments, lower latency, and new use cases

BBU: Baseband unit; DU: Distributed unit; vBBU: Virtual baseband unit; vCore: Virtual core network; vCU: Virtual central unit; MEC: Multi-access Edge Computing

5G
Open vRAN



Support different deployment scenarios

Place processing and analytics where it is needed

Simplify orchestration



Higher utilization of scalable resources

Resource pooling allows trunking gains and better cost and energy effectiveness

Rapidly scale virtual resources for additional capacity



Efficiently deploy new services

Support lower end-to-end latency

Components can evolve and be upgraded separately

Tailor dimensioning and features to suit the use case with 5G private networks



Real Estate Savings

Reduce cell-site footprint by relocating disaggregated functions to data centers



Build RAN cost-effectively

Broaden the ecosystem for competition

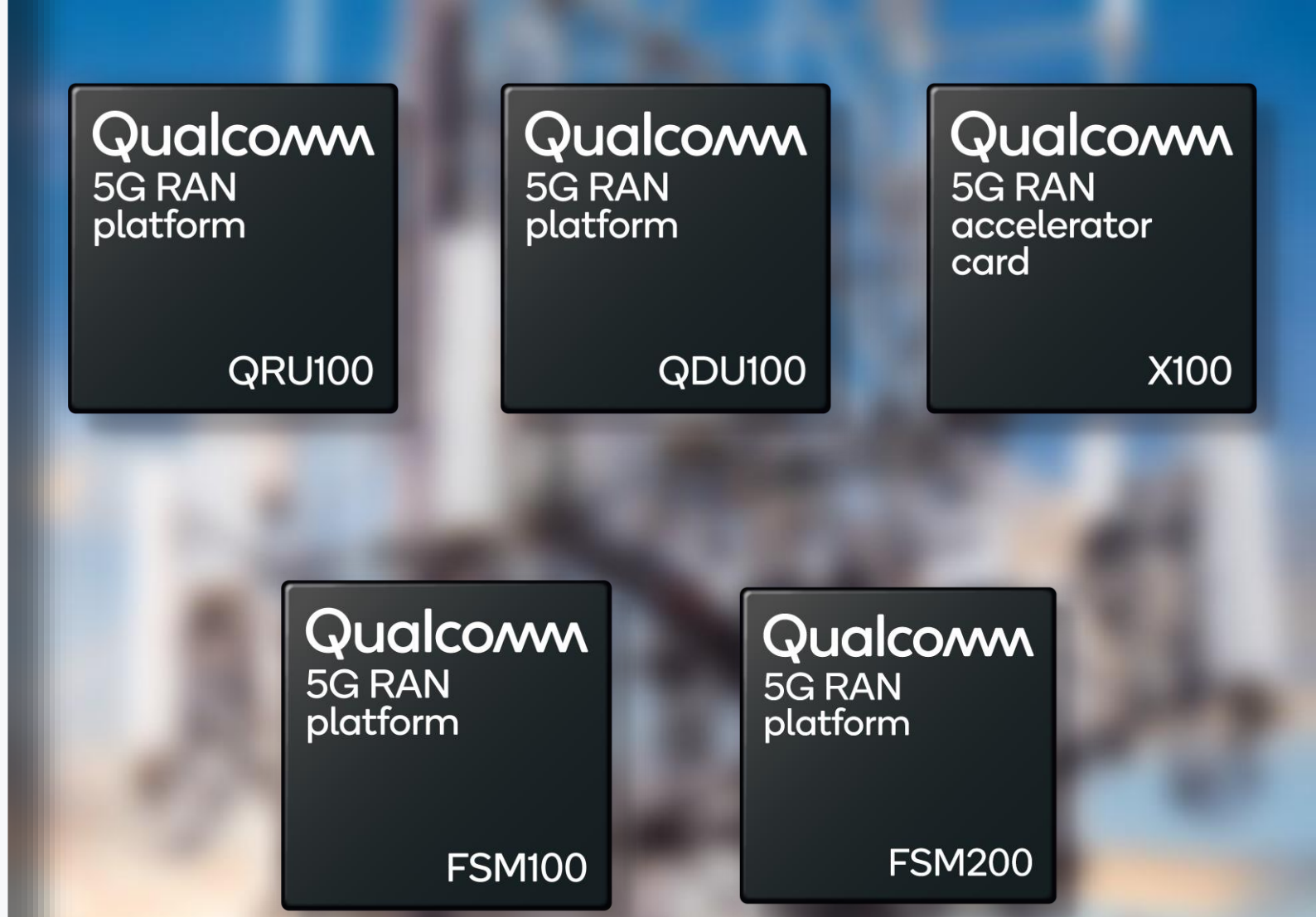
Vendor diversity spurs innovation

Deploy networks faster

with vRAN and disaggregation

Qualcomm® 5G RAN Platforms

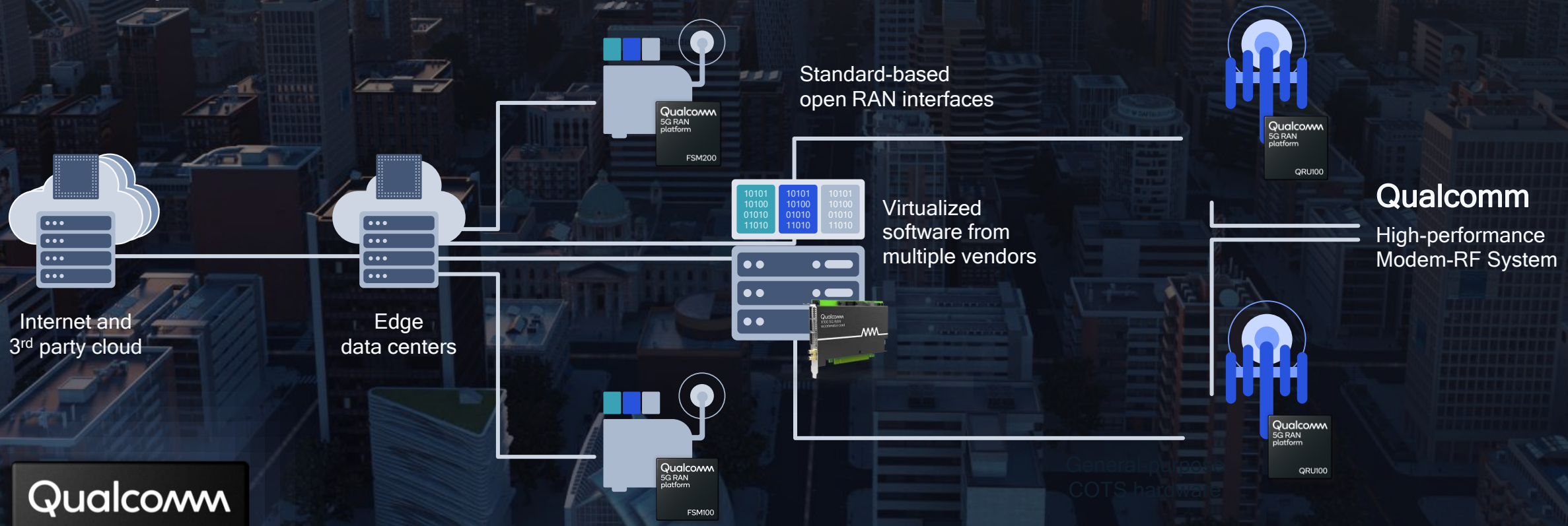
Building open and innovative cellular infrastructure with high performance Modem-RF System.



Qualcomm 5G RAN Platforms, Qualcomm QRU100 5G RAN Platform, Qualcomm QDU100 5G RAN Platform, Qualcomm X100 5G RAN Platform, Qualcomm FSM100 5G RAN Platform and Qualcomm FSM200 5G RAN Platform are products of Qualcomm Technologies, Inc. and/or its subsidiaries.

Driving transition to Infrastructure 2.0

Powered by extended portfolio of Qualcomm® 5G RAN platforms



Qualcomm
5G RAN Platforms

- High performance Modem-RF System
- Flexible, scalable, O-RAN compatible
- vRAN with hardware acceleration
- Designed for macro and small cells
- Integrated mmWave and Sub-6 GHz solution with global band support

The Modern Network





Qualcomm

Collaborating with global operators to drive adoption of 5G Open vRAN

Driving the evolution to open, virtualized 5G RAN

Hewlett Packard Enterprise

Next-generation 5G virtual DU solution

First fully optimized vDU solution with up to 60% lower operator TCO

Solution aims to improve user experiences by helping ready virtualized and open RAN platforms to support the high-capacity and low-latency workloads of future networks.

HPE ProLiant DL110 Gen10 Plus



1U server	Up to 4xM.2 NVMe	Front mounting Front to back active cooling
Shallow depth 17"	Up to 8 DIMMs (8–128GB)	4xFHHL x16 PCIe 4.0
Single socket ICX-SP, up to 205W TDP	700W AC/ DC PSU	

Qualcomm®
X100 5G RAN Accelerator Card

Layer 1 Processing

- Demodulation
- Beamforming
- Channel coding
- Massive MIMO computation

Complex latency-sensitive 5G Layer 1 Processing



Qualcomm 5G RAN Platform

Hewlett Packard Enterprise

Next-generation 5G virtual DU solution

First fully optimized vDU solution

up to

60%

Lower Operator TCO

up to

40%

Lower power consumption

Ref : According to a comprehensive joint study by Hewlett Packard Enterprise and Qualcomm Technologies, Inc

Driving the evolution to open, virtualized 5G RAN

Rakuten Symphony

Next-generation 5G DUs and RUs with massive MIMO for Open RAN 5G deployments

Solutions to enable the deployment of cloud-native, virtualized, and open 5G networks at scale

Solution Powered by Qualcomm® 5G RAN Platforms is Designed to Simplify Network Deployments, Lower TCO, and Accelerate Adoption of Cloud-Native, Open RAN-Based Mobile Networks Globally

Driving the evolution to open, virtualized 5G RAN

MAVENIR™

Next-generation 5G DUs and RUs with massive MIMO for Open RAN 5G deployments

Solutions to enable the deployment of cloud-native, virtualized, and open 5G networks at scale

Expanded Open RAN portfolio of 5G Radio Units (RU) spanning categories ranging from mmWave to massive MIMO with 64T64R capabilities to 8T8R radios to drive the transition towards modern networks

Driving the evolution to open, virtualized 5G RAN

FUJITSU

Fully-Integrated Open RAN Solution for 5G mmWave Proliferation

5G mmWave integrated DU and RU for Open RAN 5G deployments

Next-generation mmWave global solution within NTT DOCOMO's 5G Open RAN Ecosystem (OREC) initiative, ushering in global Open RAN deployments

Qualcomm

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