Qualcomm

Are you ready for 5G Advanced?

Driving 5G forward

Faster 4G→5G transition

Superior performance

5G smartphones

Fixed wireless access

5G Non-Standalone

Network slicing

Extreme capacity (NR-DC)

Lower complexity devices & networks

Ultra-low latency

New services & business models

5G coverage

5G Standalone

AI/ML for devices & networks

R18+ performance enhancements

Satellite communications

5G RedCap

Segment enhancements – XR, drones

Higher order modulation

5G Advanced

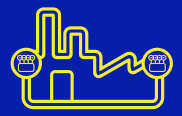
5G Advanced
key commercialization vectors in 2024-27

AI / ML
enhancements for devices and networks

Algorithms and optimization for improved device/ network performance and operations

Performance
enhancements for devices and networks

Devices and networks across throughput, coverage, reliability and power metrics



RedCap
for IoT and fixed wireless access

Power-efficient, cost-optimized IoT, compute, FWA devices and premium IoT applications

Satellite
mobile communications (NR-NTN)

Communications using standards based non-terrestrial technologies (NR-NTN, NB-NTN)

Consumer survey

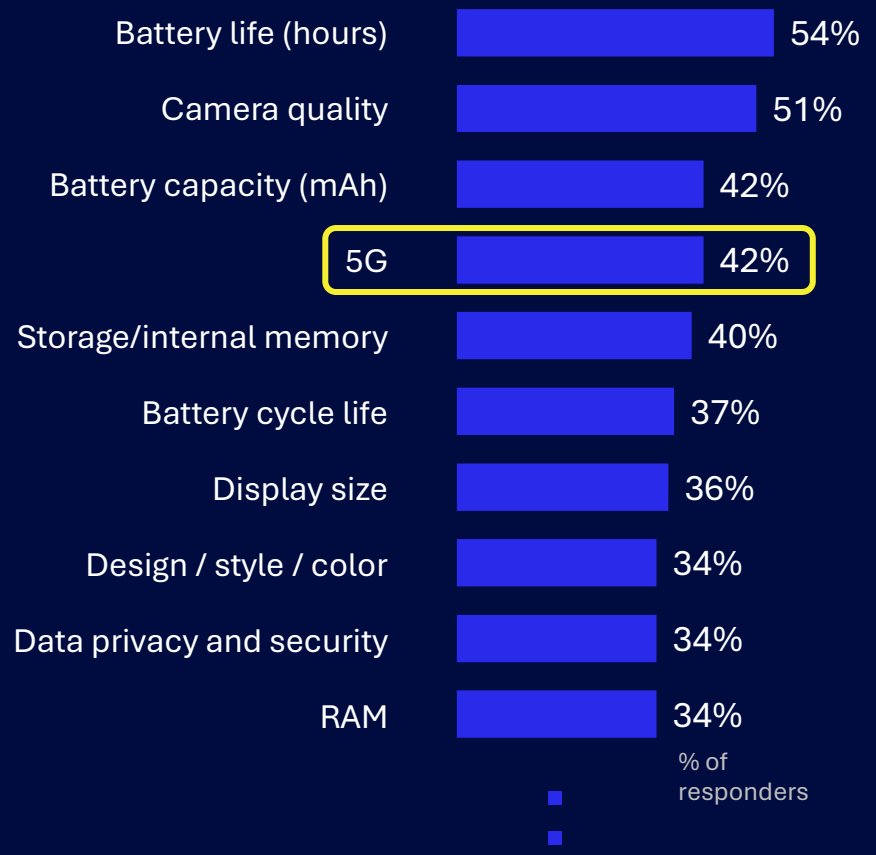
44K+
smartphone owners

11
countries

All
price tiers

FEATURE PREFERENCE

5G ranks #4 of 75 selection criteria for next phone purchase



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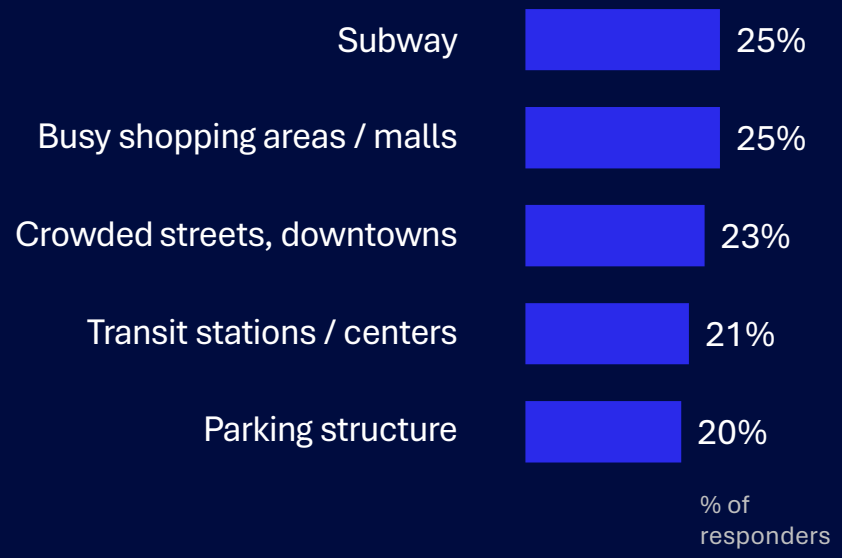
LOCATIONS WITH POOR CONNECTIVITY (TOP 5)

Opportunities for **5G Advanced** to improve user experience



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IMPACT TO NEXT PHONE PURCHASE

47%
5G Advanced very likely to drive next phone purchase

49%
Willing to pay extra for 5G Advanced

Consumer survey

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11
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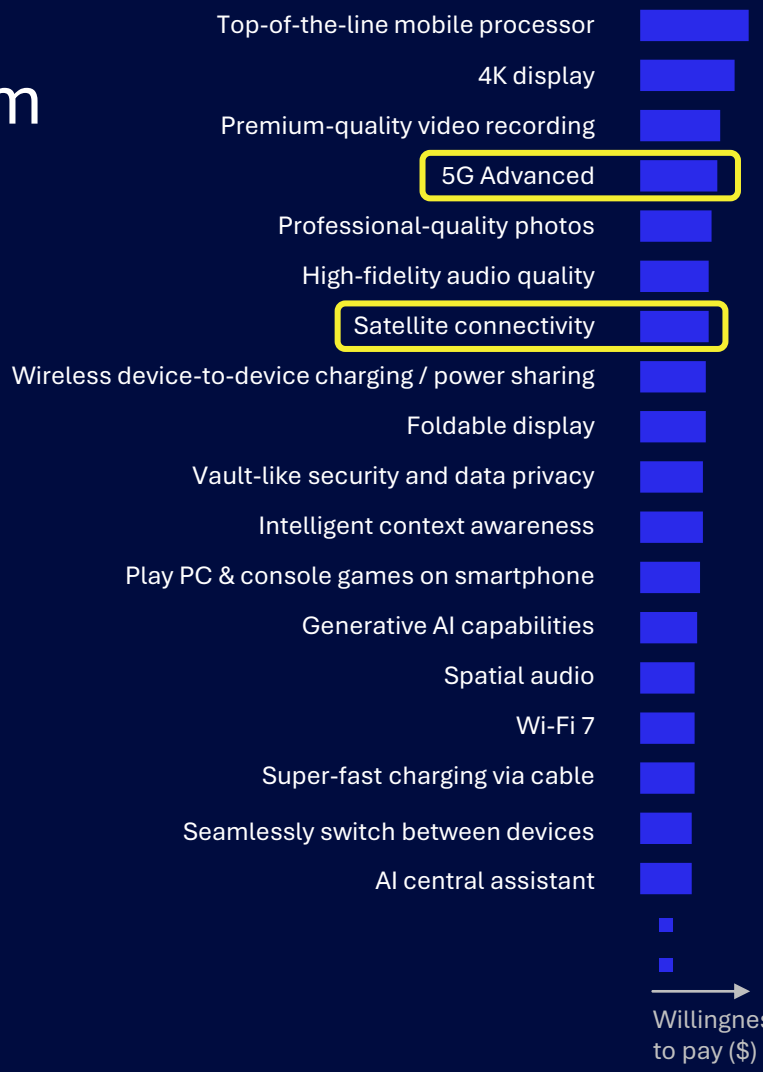
WILLINGNESS TO PAY

5G Advanced can drive device premium

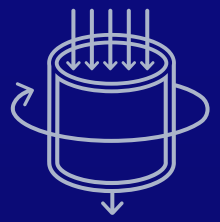
27%-50% responders (by country) willing to pay premium for advanced features



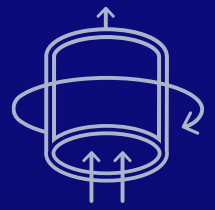
5G Standalone rollout required for 5G Advanced

Less than 25% of global operators have deployed 5G Standalone, with limited footprint

6-antenna receive (6 Rx)

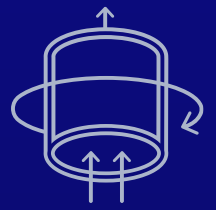


Higher-order carrier aggregation



Supplemental uplink

Uplink MIMO



Switched uplink

Low-cost SA-only smartphones

5G RedCap devices

Power features
WUS, PDCCH-skip and other R16/17 features

Power class 1.5
Transmit in TDD

Power class 2
Transmit in FDD

Device features available only in 5G Standalone mode

Modem R&D investments prioritize new features in standalone over non-standalone

5G Standalone enabling new services for operator growth

Priority slice for first responders
USA

Secure, reliable slice for utilities
USA

Reliability for point-of-sale devices
USA

Smart grid and smart city services
USA, China

Smart retail services
USA

Nationwide enterprise operations
USA

Event-based services
Singapore, USA, China

Smart manufacturing
China

5G RedCap for growth

Continued global momentum

17 **operators** deployed or investing in RedCap

13 **countries** planning or evaluating RedCap

Growing applications and footprint

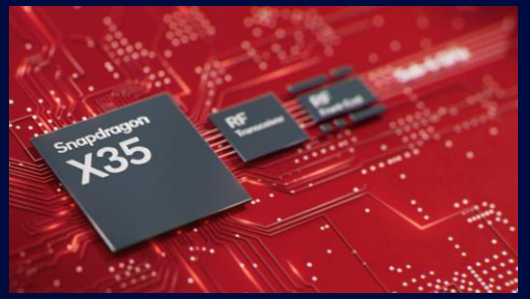
Consumer

- 5G USB dongle
- 5G hotspot
- CPE, FWA
- Smartwatch
- Low-cost 5G PC

Industrial

- Smart grid
- Smart city
- Smart manufacturing
- Smart retail

Snapdragon
X35 5G modem-RF



World's first 5G RedCap modem-RF solution for mass-tier 5G and premium consumer applications

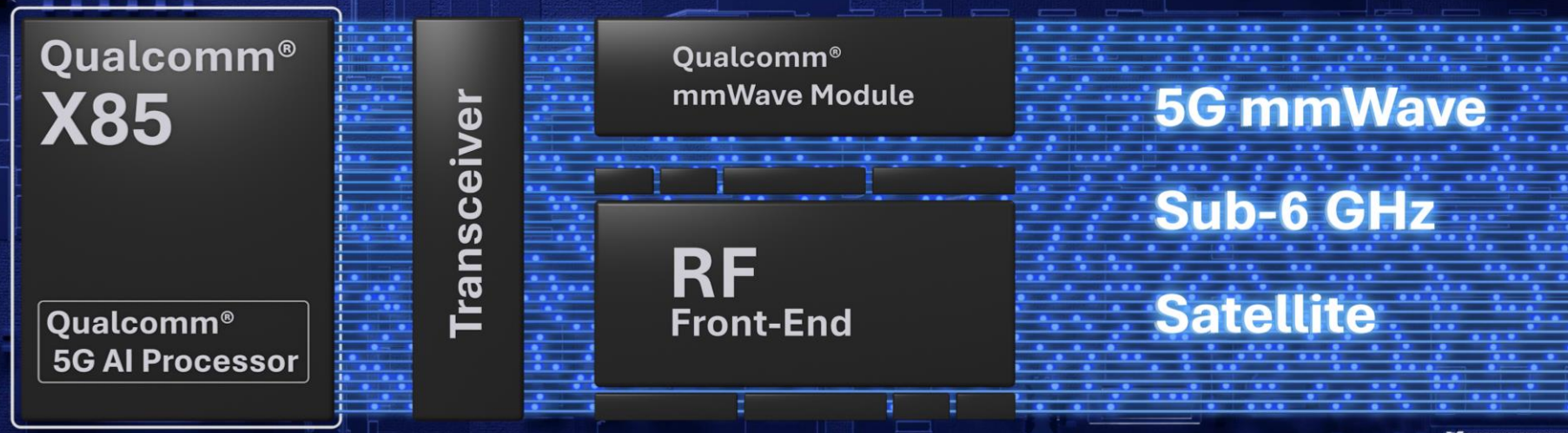
Qualcomm
X85 5G Modem-RF

AI-powered 5G Advanced across device segments

11+ Gbps

Download peak speed

Driving the ecosystem for global 5G Advanced commercialization




Smartphones


Fixed Wireless Access


Mobile Broadband


PCs


Industrial IoT

Thank you

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