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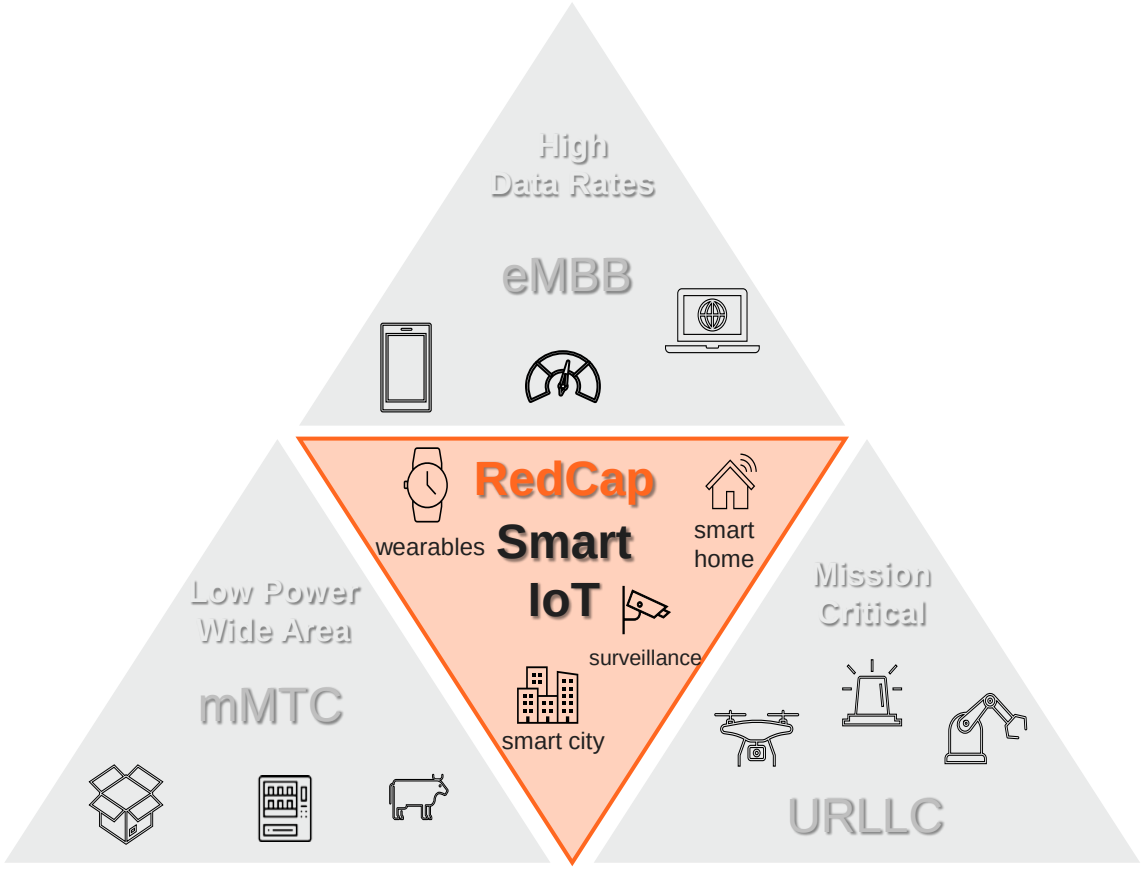
E7515R RedCap Product Launch

Media Slides
February 2023

What is 5G NR RedCap (Reduced Capability) Technology?



eMBB, mMTC and URLLC were original 5G NR requirements (link)

- Building user equipment (UE) that can benefit from the scale of 5G NR deployments but leverage fewer 5G NR capabilities.
- Achieving an optimum balance of features versus cost and power consumption. Enabling new use cases not possible earlier.
- Supporting the coverage, cost and power consumption requirements of IoT applications while operating on 5G networks.
- Minimize the incremental cost of devices to maximize the benefit of remote wireless access.

Introducing the E7515R UXM 5G Wireless Test Platform

Optimized platform for 5G NR RedCap and CIoT testing

- ✓ Reduced capability hardware platform
- ✓ Optimized for 5G RedCap & CIoT
- ✓ Based on same architecture as E7515B
- ✓ Same software & solutions as E7515B

UXM 5G Wireless Test Platform

Designed for RedCap Testing

- 5G NR Rel-17 RedCap FDD, HD-FDD, TDD
- Protocol, RF, and Functional (IP data, Voice, Battery) testing
- FR1 up to 6GHz and FR2-ready
- 2 Tx DL + 2 Rx UL RF ports @ 100 MHz
- Flexible RF connector usage (combined or separate Tx/Rx)
- Baseband IQ interface
- Embedded PC (external monitor or remote desktop)
- Additional Rel-17 features
  - R17 Power Saving Enhancements
  - R17 Small Data Transmissions
  - R17 UL Coverage Enhancements

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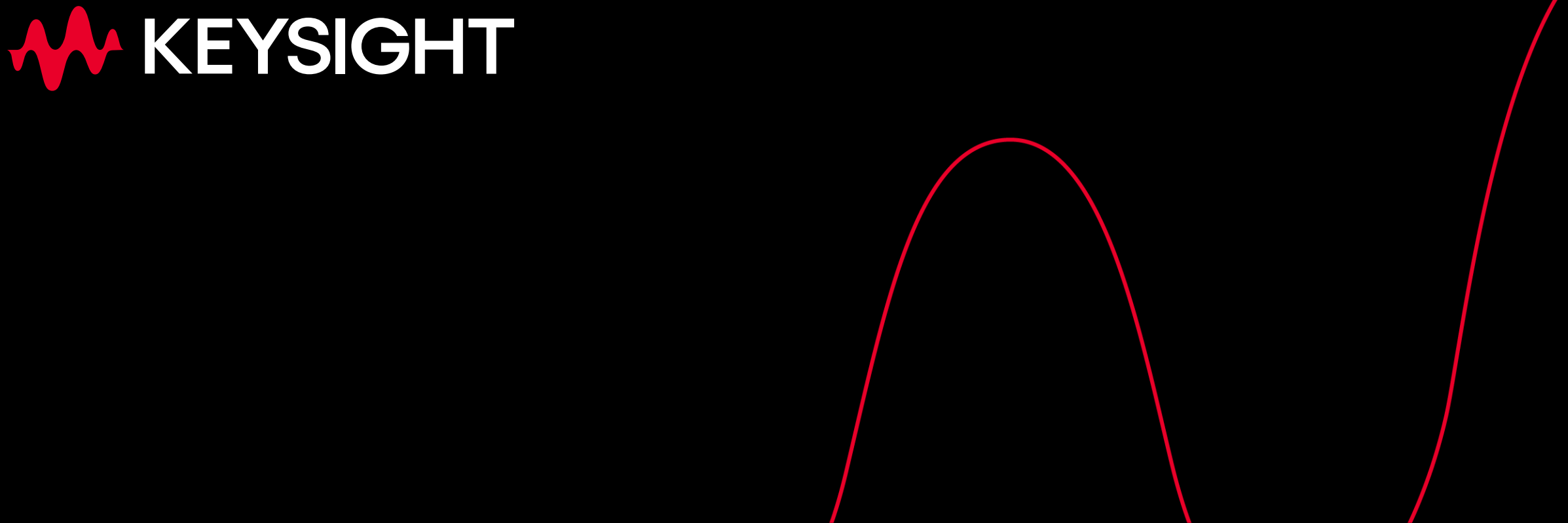
RedCap Use Case

Application: Tailored test solution for RedCap (Reduced Capabilities) devices testing to accelerate their time to market.

Use case: RedCap technology is used for Smart IoT. A RedCap use case is wearables testing. Wearable technology refers to any kind of electronic device designed and worn on the user's body. The most popular wearable technology today is the Smart Watch. It is well-known and extensively utilized alongside smart bands. They account for approximately 60% of the total wearable market. Other wearable IoT devices are Gaming Armbands, Smart glasses and the GPS tracking band.

List of Acronyms

- DL: DownLink
- eMBB: enhanced Mobile BroadBand
- FDD: Frequency Division Duplex (FDD)
- FR1: Frequency Range 1
- FR2: Frequency Range 2
- HD-FDD: Half-Duplex FDD
- IQ: In-phase, Quadrature
- IP: Internet Protocol
- mMTC: massive Machine Type Communications
- NR: New Radio
- PC: Personal Computer
- RF: Radio Frequency (RF)
- Rx: Receivers
- TDD: Time Division Duplex
- Tx: Transmitters
- UL: UpLink
- URLLC: Ultra Reliable Low Latency Communications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