Enabling the Fully Connected World

SAMSUNG

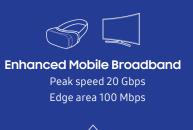
With blazing speed, minimal latency, and massive connectivity, 5G will transform the way we live, work, get around, and much more.

With a long legacy of mobile innovation, Samsung is making 5G a reality to deliver its benefits to consumers, businesses, and cities—wherever they are.

With 2G, we helped put the phone in your pocket. With 3G and 4G, we put the internet in your pocket. With 5G, we'll not only put wireless fiber in your pocket, but also in your car, home, office, and across your city.

With speeds up to 20 times faster than 4G and super low, 1ms latency, 5G can support up to a million devices per square kilometer and will usher in the next generation of mobile networks—a world in which everything has fast, instantaneous connectivity to our surroundings.

Benefits of 5G





Ultra Reliable & Low Latency 1 ms latency 10⁻⁹ error-rate, ultra reliability Massive Machine-Type Communications 1 million device connections/km² High energy efficiency

Samsung is uniquely positioned to lead the transition to 5G because of our:

END-TO-END TECHNOLOGY Samsung makes all the parts integral to 5G chips, network equipment, and devices, including smartphones, smart TVs, appliances, and automotive solutions–all with industry-leading security standards. This includes the first miniaturized RF chipset and modem integral to 5G. No other company can provide this entire 5G ecosystem with a trusted global supply chain.

LEGACY OF INNOVATION: We're building on more than 35 years of experience in designing and engineering communications solutions. Leveraging our experience in the implementation of 2G, 3G, and 4G technologies, we're taking the lead in 5G as well.

REACH, SCALE, AND PARTNERSHIPS: We understand the importance of collaboration and work with partners across the industry to offer products and solutions that bring 5G networks online.

Our 5G innovations continue to progress across the country and around the world. In 2019 alone, we:

Sold 2 million 5G smartphones worldwide.

Played a leading role in the launch of 5G NR by all three South Korean carriers in April.

Teamed up with KDDI (Japan) to deliver 5G solutions to power their 5G network following the completion of exciting trials with KDDI, where we demonstrated 4K streaming on multiple 5G-enabled tablets at a baseball stadium and tested 5G video drones to provide public safety first responders with more tools in smart cities.

Teamed up with SK Telecom (Korea) to showcase 5G at a race track, transmitting real-time video from a racing car moving at more than 130 mph.

Kicked off a project with AT&T Business and Samsung Austin Semiconductor in Texas to create a 5G research space for the manufacturing industry and apply insights to the next-generation Smart Factory.

In partnership with AT&T, we connected fans of all types to super-charged experiences from interacting with live sports on 5G in the world's first 5G stadium to the first live broadcast on 5G.

Samsung: A Timeline of World Firsts



2011 4G LTE small cell

2012 4G VoLTE

testbed

4G eMBMS 5G mmWave 5G mmWave multi-cell handover (100 km/hour)

2016

5G mmWave high-speed mobility (150 km/hour)

2017

5G mmWave commercial trials (8 U.S. cities) Fastest 5G handover (192 km/hour) 2019

Galaxy S10 5G Note10+5G

Next generation 5G chipset

Mobile and fixed 5G networks live in U.S. cities

Industry-first 5G New Radio (NR) integrated Access Unit (AU) supporting 28GHz spectrum

Why Samsung is Betting on 5G

We have a bold vision for tomorrow: a world of connected devices, working seamlessly to make life safer, more manageable and a whole lot more fun.

Picture 5G applied to everyday life. The Internet of Things, smart cities, and connected vehicles are safer because they can communicate with each other and with their surroundings. Picture all of your data and services fully accessible, anytime and anywhere.

That picture of a fully connected world is why Samsung has been making big bets on 5G technology, which will become the framework for a new connected lifestyle. And it's why we have been investing in companies that give us even greater ability to navigate the 5G future.

We've also made an important commitment: All of our devices will be IoT-enabled and intelligent by 2020. In fact, we're ahead of schedule; 90% of our devices are already IoT-enabled.

Samsung is Driving 5G Adoption Across the U.S.

2014

In 2018, Samsung became the first company to receive FCC approval of its 5G end-to-end network portfolio—a critical step toward making 5G a reality.

In October 2018, Samsung 5G products supported the launch of Verizon 5G Home, the world's first 5G commercial broadband service.

In fall 2018, AT&T selected Samsung as a 5G New Radio (NR) provider for AT&T's expanded 5G rollout in 2019.

In summer 2019, Samsung supported commercial mobile 5G NR launches for Sprint and Verizon.

In 2019, we put the power of 5G in consumers' hands with our first 5G flagship smartphones, the Galaxy S10 5G and Note10+5G.

We're Just Getting Started

Drawing on our rich history and working with the best industry partners, we are excited to help deliver transformative solutions for a bright 5G future.

2018

5G mmWave

commercial

of 2018)

solutions

service (launch

in second half

FCC authorized

5G commercial

Samsung believes that, just as the right policies and regulations have played a pivotal role in facilitating each generation of mobile technology, they will also help drive rapid deployment of 5G.

We look forward to working with our government partners to more spectrum to commercial use, streamline regulations on infrastructure deployment, and promote end-to-end security.

Samsung

Note10+5G





Router

Unit

5G

Modem



Galaxy S10 5G