

SOLiD and Intel Alliance Leverages Intel mDR and FPGA Technology to Develop 5G mmWave Repeaters

PLANO, Texas — September 2, 2020—SOLiD, the leader in indoor and outdoor cellular and public safety communications infrastructure, today announced new RocketWAVE™ 5G mmWave repeaters based on Intel mDR and FPGA technologies to address coverage challenges in high band spectrum. The license of the Intel technology enhances SOLiD's prior investment and development of 5G mmWave repeater technology. Building on the success of multiple trials, the alliance leverages Intel's field-proven technology to accelerate the time to market and improve the features of SOLiD's RocketWAVE™ 5G mmWave repeaters.

There are three primary use-cases for enhancing coverage with 5G mmWave repeaters: mobile outdoor urban, mobile in-building, and fixed-wireless access.

Outdoor urban 5G mmWave mobile coverage faces challenges resulting from reduced range and easily obstructed high band signals. RocketWAVE™ 5G mmWave repeaters overcome these limitations by extending coverage distance and retransmitting signals around obstructions, which reduces CAPEX by decreasing the required number of 5G cell sites.



In-building 5G mmWave mobile coverage is not practical with an outside-in macro-cellular approach because high band signals do not penetrate buildings. RocketWAVE™ receives 5G mmWave signals from a rooftop or wall mounted donor antenna and repeats the signals to antennas inside the building.



Fixed wireless access leverages the massive bandwidth of 5G mmWave to provide high-speed and low latency data connections. But these connections mainly benefit from line-of-sight conditions from the 5G gNb to the consumer premise equipment (CPE) typically located on the windows of a building. RocketWAVE™ 5G mmWave repeaters extend line-of-sight conditions and overcome the coverage gaps in the network by intelligently repeating signals around obstructions such as foliage, buildings, and natural terrain.

SOLiD architected this new solution based on Intel 5G mmWave Distributed Relay (mDR) technology assets and field-proven Intel Cyclone FPGAs.



"Integrating Intel's technology will accelerate the development of RocketWAVE™ mmWave repeaters, which are a critical component of 5G deployments," said Ken Sandfeld, President SOLiD Americas. "Our RocketWAVE™ repeater will soon provide flexibility to the operators for ease of installation and maintenance through its unique and powerful cloud-based management software."

"SOLiD's development on Intel's mDR and Intel Cyclone® FPGA series can aid in overcoming connectivity challenges inherent in the mmWave bands. These technologies have the potential to significantly improve 5G coverage for operators rolling out 5G networks," said Asha Keddy, Corporate Vice President and General Manager, Next Generation and Standards at Intel.

SOLiD enables indoor and outdoor cellular and public-safety communications at many of the world's best-known and most challenging venues. From the busiest airports and subways to Fortune 500 corporate buildings, hospitals, hotels, and universities, professional and college sports venues, government, industrial and logistics facilities, SOLiD's modular solutions scale to every challenge. SOLiD continuously innovates to deliver best in class solutions with ALLIANCE 5G DAS, RocketWAVE™ 5G mmWave repeaters, Infinity Access optical fronthaul and backhaul, and SURF Open RAN (O-RAN) networks. Edge Connectivity, SOLiD Coverage, visit www.solid.com/us or call 1-(888) 409-9997.

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