NI, Radisys and CommScope Collaborate on 28 GHz 5G New Radio InterOperability Device Testing

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AUSTIN, Texas--(BUSINESS WIRE)--Apr. 24, 2019-- NI (Nasdaq: NATI), the provider of platform-based systems that help engineers and scientists solve the world's greatest engineering challenges; Radisys®, a global leader of open telecom solutions; and CommScope (NASDAQ: COMM), a global leader in infrastructure solutions for communications networks, today announced that they have collaborated to demonstrate a 28 GHz 5G New Radio (NR) network at the Brooklyn 5G Summit 2019. This first public demonstration of the three companies' collaboration shows a 28 GHz base station or gNodeB built from a CommScope remote radio unit (RRU) running software developed by Radisys that communicates with an NI Test UE.

Commercial rollout of sub-6 GHz 5G networks has begun, and mmWave technology continues to be developed even as this rollout is underway. Research and development teams around the globe have been tackling the challenges that mmWave presents, and early versions of 28 GHz equipment are emerging. An important step in delivering this technology to market is helping to ensure that network equipment (gNodeB) and user equipment (UE) work together properly (commonly referred to as InterOperability Device Testing, IoDT) and that the technology can be used in a variety of scenarios from inside a lab to outdoor field trials.

This demo showcases a 3GPP Release 15 non-standalone mmWave network created using equipment from multiple vendors. The above-6 GHz NI Test UE runs a physical layer designed by NI on NI's mmWave Transceiver System and a mmWave software defined radio (SDR) with an upper layer stack provided by Radisys. The 5G NR Software Suite by Radisys enables the NI Test UE in mmWave frequency spectrum for non-standalone and standalone modes of operation. The gNodeB is built with a physical layer running on an Intel FlexRAN, an upper layer protocol stack provided by Radisys and a remote radio unit (RRU), or antenna, from CommScope. A commercial LTE small cell is used as the LTE anchor. Combined, this system can make a live 5G NR mmWave call between the NI Test UE and the commercial 5G base station, made up of a CommScope RRU, Intel FlexRAN and Radisys protocol stack.

"We're pleased to work with industry leaders NI and CommScope to power this important demonstration that showcases the industry's first multivendor RAN ecosystem based on O-RAN compliant specifications, especially the F1 interface for CU – DU disaggregation enabling mmWave 5G deployments for cases beyond just fixed wireless backhaul," said Neeraj Patel, vice president and general manager of Software and Services at Radisys. "In addition to delivering a scalable Open RAN solution, Radisys also provided integration, test and validation services for end-to-end operationalization of the complete system from the UE to the gNB to the core network. We're excited about the possibilities that 5G offers to our customers, and we're committed to accelerating commercialization of these successful trials."

Farid Firouzbakht, CommScope senior vice president of RF products, said, "Our integrated antenna enables the full capabilities of 5G mmWave spectrum bands while offering maximum flexibility within an open RAN environment. As a contributing member to the ORAN organization, we endorse the benefits of an open baseband interface for enabling more innovation in the wireless marketplace."

James Kimery, NI director of marketing for wireless research, said, "This demonstration validates NI's hardware and software mmWave SDR platform by involving commercial vendors CommScope and Radisys. This is one of the first end-to-end mmWave systems developed, and it clearly demonstrates multivendor interoperability that is critical to the wider 5G ecosystem."

About NI

NI (www.ni.com) develops high-performance automated test and automated measurement systems to help you solve your engineering challenges now and into the future. Our open, software-defined platform uses modular hardware and an expansive ecosystem to help you turn powerful possibilities into real solutions.

About Radisys

Radisys, a global leader in open telecom solutions, enables service providers to drive disruption with new open architecture business models. Radisys' innovative disaggregated and virtualized enabling technology solutions leverage open reference architectures and standards, combined with open software and hardware to power business transformation for the telecom industry, while its world-class services organization delivers systems integration expertise necessary to solve communications and content providers' complex deployment challenges. For more information, visit www.Radisys.com

About CommScope

CommScope (NASDAQ: COMM) and the recently acquired ARRIS and Ruckus Networks are redefining tomorrow by shaping the future of wired and wireless communications. Our combined global team of employees, innovators and technologists have empowered customers in all regions of the world to anticipate what's next and push the boundaries of what's possible. Discover more at www.commscope.com.

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