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Press Release

Comcores demonstrates Radio-Over-Ethernet and L1 offload solution live at ITU FG IMT-2020 Workshop and Demo Day: Wireline Technology Enablers for 5G

Copenhagen, Denmark, Dec 7, 2016 – Denmark Headquartered Comcores ApS, a specialized supplier of silicon intellectual property (SIP) today made a live demonstration of an end-to-end Radio-Over-Ethernet (RoE) and L1 offload solution targeting FPGA and ASIC devices, to be used in wireless fronthaul.

The demonstration shows how CPRI signals can be transmitted across an Ethernet connection and it demonstrates how the required bandwidth can be reduced by more than a factor 4 by adopting a L1 offload scheme where resource mapping and de-mapping is taking place at the RRH side. The solution includes a 10G TSN-solution supporting features like Frame Pre-emption (IEEE 802.3 br and IEEE 802.1 Qbu) and Timing and Synchronization (IEEE 802.1 AS) which enables timely delivery of I/Q data across the Ethernet link.

The demonstration transmits and receives data between two Xilinx based HW platforms having one board representing the baseband portion of the system and the other board representing the radio solution. The CPRI connectivity across the Ethernet link connecting the two boards is validated with a Sarokal X-Step tester that analyzes delay and signal integrity across the link. Likewise the functioning of the L1 offload scheme is demonstrated by displaying a 64 QAM constellation diagram on a Keysight Spectrum Analyzer that represents the 20 MHz LTE carrier transmitted across the Ethernet link.

Comcores RoE and L1 offload solution is the first commercial solution available and allows for early prototyping and testing of Ethernet based fronthaul systems. The SIP has been tested in a network setup and a test platform solution can be delivered as part of the offering.

“Efficiency, in terms of cost, power and time to market, are paramount to enable any new technology like Radio Over Ethernet and L1 offload”, said Thomas Noergaard, Founder of Comcores. “Bringing a robust and proven solution to market enables easy adoption of the features that this new technology is offering”.

About Comcores

Comcores is a leading provider of silicon agnostic IP-cores for communication systems. State of the art know how and practical experience enabling connectivity in communication systems are key elements in Comcores’s delivery of unique, high quality, production-proven IP-cores. Comcores solutions not only accelerate development and cut costs, they increase overall design reliability and project predictability.

To learn more about IP-core offerings from Comcores please visit www.comcores.com or contact us at info@comcores.com

Privately held Comcores is headquartered in Greater Copenhagen Area, Denmark.