Power Consumption of CPRI-Based Designs Reduced by up to 80%

eASIC Corporation and Radiocomp recently announced the immediate availability of a low power Common Public Radio Interface (CPRI) v4.1 solution for Radio Equipment Controller (REC) equipment. Using the low power transceivers on eASIC Nextreme-2T NEW ASICs, and the industry proven CPRI v4.1 REC IP core from Radiocomp, the solution consumes only 190 mW per channel at 6.144 Gbps. The combination of CPRI v4.1 IP and eASIC Nextreme-2T NEW ASICs enables base-station baseband module suppliers to accelerate cost reductions of FPGA-based designs and at the same time decrease power consumption by up to 80%. CPRI is the most widely deployed interface between baseband and radio sections of a wireless base station and has traditionally been implemented using expensive and high power consumption FPGAs. The availability of the eASIC CPRI REC solution allows FPGA designers to engage in cost and power reduction efforts much sooner and at a fraction of the development cost for cell-based ASICs. The Radiocomp CPRI v4.1 core has already been verified in both FPGAs and eASIC devices and features: Built-in support for CPRI v4.1 REC and backwards compatible mapping methods; Programmable Line rates up to 6.144 Gbps; Up to 32 antenna carriers per IP core; Integrated HDLC and 10/100 Ethernet MAC controllers or external MII interface; Portable HDL code for easy migration from FPGAs to eASIC.