Entropic Communications Inc. is raising eyebrows at The Cable Show in Boston by showing a full chip set implementing the second-generation Multimedia Over Co-ax (MoCA 2.0) standard. With a silicon suite that includes MAC devices, physical-layer chip, RF transceiver and RF front end, Entropic’s MoCA 2.0 suite can support data rates of 400 Mbits/sec over 16 nodes, or a special Turbo speed of 500 Mbits/sec over two nodes.

MoCA chips are used in equipment deployed by cable TV multi-system operators as well as pay-TV specialists. The chips can support high-definition TV along with high-speed Internet in a full home-network topology. Entropic’s chips, implemented in 40-nm CMOS, are backward compatible with MoCA 1.0 and 1.1.

Entropic offers a low-power mode for its chips which keep the entire chip set in sleep state until a wake-on-MoCA condition is encountered. The chips offer packet error rates as low as 1e-6, and latency of 3.5 ms. Entropic offers software and reference designs to implement a complete, low-cost MoCA 2.0 solution from F-connector to host interface.