1.25 Gbit/s AC PAROLI[®]: An Optical Link for HIPPI-6400 operation

Elmar Dröge, Infineon Technologies - Fiber Optics, Berlin, Germany

The 1.25 Gbit/s AC PAROLI® is Infineon's optical link solution for use in a HIPPI-64000 environment. Electrical interfacing is realized on the basis of 12 LVDS input lines (Tx) and 12 LVDS output lines (Rx). The optical transmitter uses 850nm VCSEL technology and the receiver module uses InGaAs based PIN-diodes. A complete cabling system based on MT technology including 12 fiber ribbon cables and connectors is part of the PAROLI® link. Data rates of 1.25 Gbit/s per channel at link lengths of up to 300m are reached with the current PAROLI® version – so the HIPPI-6400 criteria (1.0 Gbit/s at a link length of 220m) are more than met. Future developments include PAROLI® links working at 1.6 Gbit/s, 2.5 Gbit/s and higher.