

40GbE Serial and 40G VSR Compact Optical Transceiver

OBJECTIVES

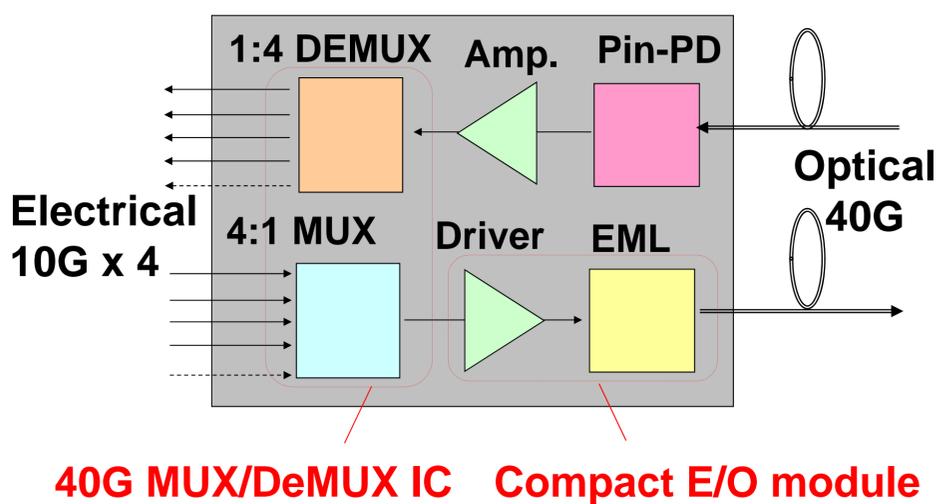
- 40G compact optical transceiver for ultra-fast optical NIC
- Applicable for 40GbE serial and 40G VSR

TECHNICAL CHALLENGES

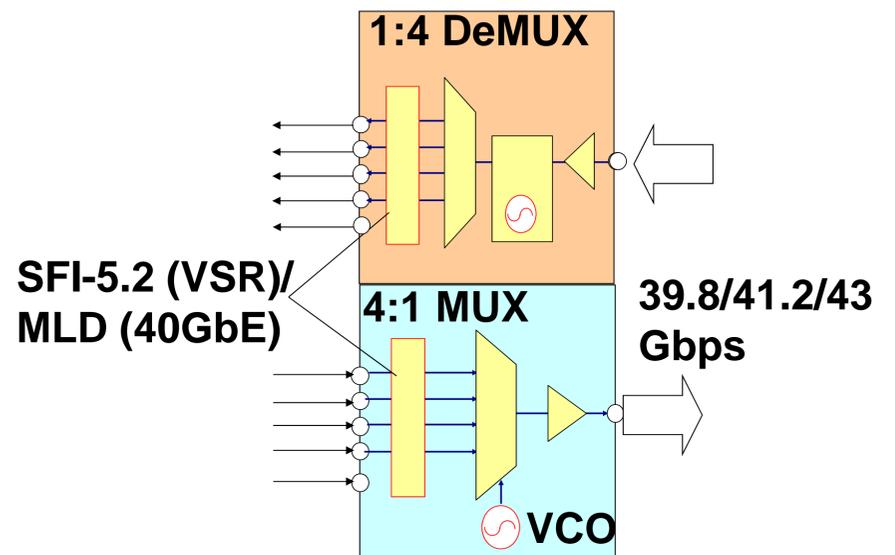
- Low-power 40G MUX/DeMUX ICs using advanced CMOS technologies
- Compact E/O module with broadband FPC connection technique
- High-speed packaging technology

Block-diagram of 40G Compact Optical Transceiver

40G Optical Transceiver



40G CMOS MUX/DeMUX ICs for 40GbE serial and 40G VSR



ACCOMPLISHMENT

40GbE serial and 40G VSR Optical Transceiver

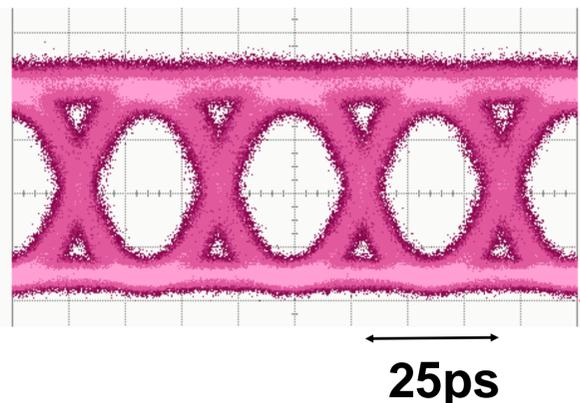
- 40G MUX/DeMUX ICs and Compact E/O module mounted on the board
- Achieved 40GbE serial and 40G VSR operation
- 1/3 size and 1/2 power consumption compared to conventional one
- Succeeded in developing the world's first optical transceiver for 40GbE serial and contributed to the IEEE802.3bg standardization

Optical Transceiver



Size : 91.5 x 41.8 mm
Power : 5.6 W

40G Optical Eye Diagram



40G Receiver Sensitivity

