64b/66b High-speed Serial Interface IP (ION 64b66b)

High-speed serial interface achieved using a lightweight protocol

Overview

ION 64b66b is an IP for high-speed serial interface targeting applications with inter-chip and inter-board connections.

Lightweight link layer protocol provides one-to-one data movement via one or more high-speed serial lanes.

Features

- Supports up to 16 lanes
- Supports CRC function
- Supports Scrambler function
- Supports asymmetrical link

Specifications

| Function | Description |
|-------------------------|-------------|
| Maximum Number of Lanes | 16 |
| Encoding | 64B/66B |
| Data Width Per Lane | 64 bit |

Supported Devices

- Cyclone 10 GX
- Arria 10 GX

(* Please contact Macnica sales department about other devices.) $\,$

Deliverables

- Encrypted RTL (Verilog HDL)
- Reference design
- Simulation environment (For ModelSim)
- User's manual, Reference manual