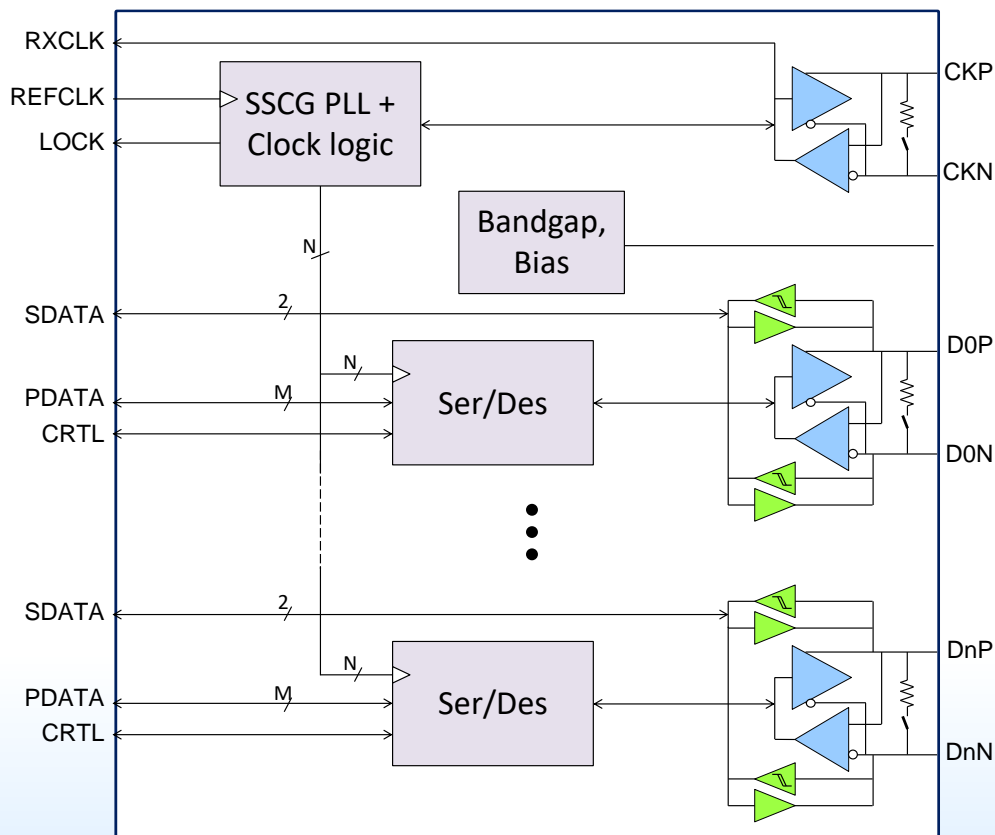


## Overview

Silicon Creations has a range of LVDS interface IP built upon proven ring PLLs and high-speed line drivers and receivers. This includes robust phase alignment leveraging our CDR architecture that has been proven in processes from 90nm to 6nm. Our robust development methodology enables rapid and safe development of High-speed IOs and semi-custom SerDes to meet specific requirements.



## Features

- >20:1 range in input/output data rates. Pixel clock from 9MHz to 190MHz in a single macro (serial line rates to >2Gbps)
- Rich digital Verilog models with loop dynamics allow whole-system modeling
- Input-only, output-only or bi-directional interfaces available
- LVCMOS can be included to save pins
- Trimmable on-die termination available
- Minimal, or no additional on-chip supply decoupling required
- Foundry IOs instantiated for pain-free ESD integration and good signal integrity
- Whole interfaces, or just the IOs
- Interfaces meeting CameraLink, FPDLink, OpenLDI, FastLVDS and similar standards
- Driver/receiver compliant with TIA/EIA 644A LVDS, Sub-LVDS, MLVDS, TMDS and POD12 in 5n

# LVDS INTERFACES

## Availability

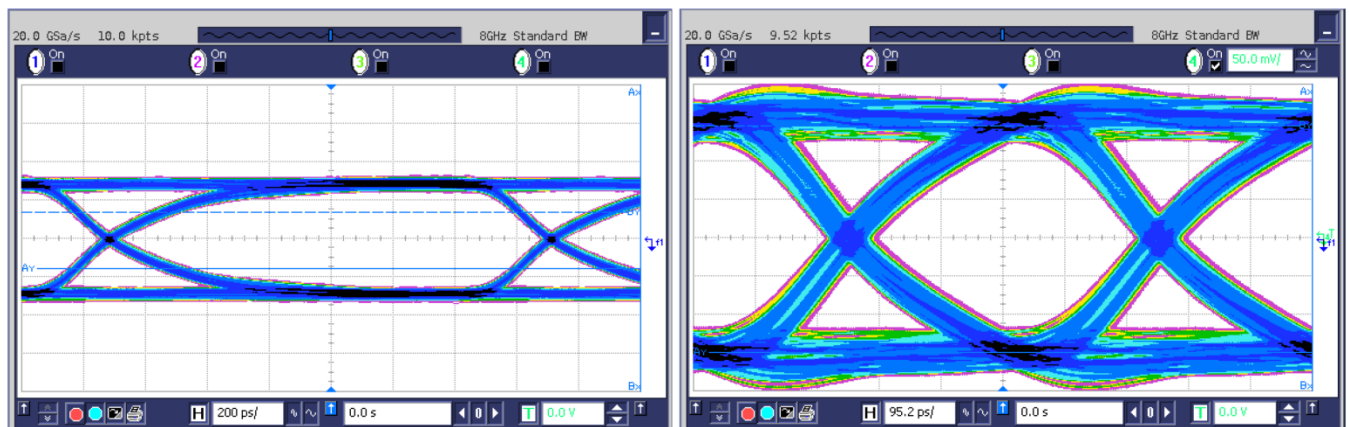
Silicon proven or mass production in 6n, 7n, 12n, 16n, 28n, 40n, 65n and 90n at GF, SMIC, TSMC, UMC. Available as a fully assembled macro instantiating foundry IO cells or just the LVDS IO, and as input-only, output-only or bi-directional. POD12 available in 5n.

## Deliverables

- GDSII
- CDL Netlist
- Rich Verilog Model with Jitter and loop dynamics
- Liberty timing models (.lib)
- LEF layout abstract
- RTL for word alignment and dynamic phase alignment
- Comprehensive Application Note
- Industry leading support by IP designers
- Comprehensive test reports for many processes

## Predictable and excellent performance

Data eye over 10" PCB + 9ft cable at 700Mbps (emphasis off) and 2.2Gbps (emphasis on):



## About Silicon Creations

Silicon Creations is focused on providing world class silicon IP for precision and general purpose timing (PLLs), Chip-chip SerDes and high-speed differential IOs.

Our IP is in production from 5n to 180n and proven in 3n. Our complete commitment to our customer success and our support will delight you. Our IP has an excellent record of first silicon to mass production in customers' designs. Our key designs have been comprehensively verified in our labs as well as in mass production with multiple customers.

Silicon Creations was founded in 2006, is self-funded, growing and ISO9001 certified. We have development centers in Atlanta, USA and Krakow, Poland and world-wide sales representation.

## Contact us

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## Related Information

- [www.siliconcr.com](http://www.siliconcr.com)
- Products
- LVDS Interfaces

