

Interface IP

LVDS I/O Buffer

Overview

The LVDS I/O has driver and receiver of TSMC 16, 22, 28, 40nm process.

- Support LVDS specification is TIA/EIA-644-A and SMIA 1.0 CCP2
- LVDS driver and receiver support data rates up to 600Mbps to 1Gbps.
- ESD, LatchUp compliant with AEC-Q100 for automotive.
- Power supplies 1.8V±0.15V for IO and core power supplies.

Block Diagram



Lineup & Status

| Category | IP | Up to | TSMC | | | | | |
|-----------|--|-------|----------|------------|-------|-------|-------|--------|
| | | | 40LP/ULP | 28HPC/HPC+ | 22ULP | 16FFC | 12FFC | N7/N7+ |
| Interface | LVDS (TIA/EIA-644-A, IEEE1596.3) | 1Gbps | ● | ● | ● | ● | ○ | ✓ |

● Ready for MP ○ In development ✓ In planning

Application

| Application | Example |
|-----------------------------|-------------------------|
| Transfer of image data | Display, FPD-Link |
| Communication between chips | Printer, Industrial |
| Backplane for data transfer | DisplayPort AUX Channel |
| Network communication | SGMII |

CTPD-24-063
R06PF0010EJ0101