SMPTE 2059-1/2 IP Package

Video transfer over IP, Supports PTP

Overview

SMPTE 2059 is a standard for synchronization of video equipment over an IP network. The standard is based on IEEE1588.
This IP generates a timing signal standardized in SMPTE2059 using IEEE1588v2 Precision Time Protocol (PTP).
The timing signal is utilized as "GenLock" signal which has been used in conventional A/V system.

Features

- Supports IEEE 1588v2 Master/Slave mode
- Flexible customization combining with FPGA HW
- More tolerant for Network Jitter
- Shorten Lock time

Specifications

- IPv4 Base
- Supports both Master and Slave
- Video/Audio AP output
- 1pps output
- TC output

Supported Devices

- Cyclone V SX
- Arria 10 SX

(* Please contact Macnica sales department about other devices.)
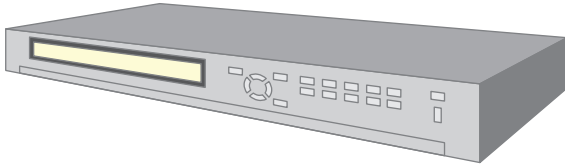
Deliverables

- Binary SW
- Encrypted RTL (Verilog HDL)
- Reference design
- User's Manual

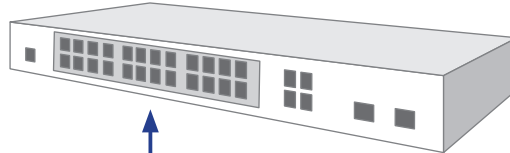## Device Resource Utilization

- Please contact Macnica sales department.
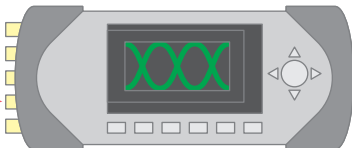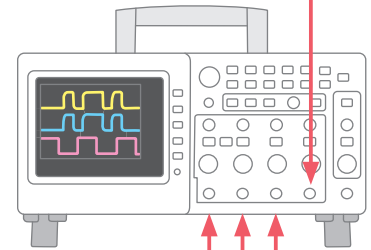
Grand Master

1 PPS

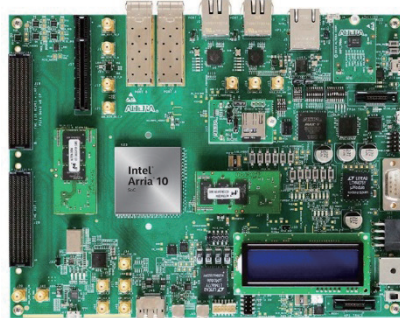PTP

D-Link L2 Switch

RTP & PTP

SDI Gen

1 PPS

V-sync (Epoch counter Base)

V-sync (Rec Pixel Clock Base)

Intel Arria 10 SoC Development Kit

SDI