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Security Link Over Coax™ (SLOC™) Receiver

TW3811

SLOC[™] (Security Link Over Coax) is a transmission protocol for simultaneously transmitting analog CVBS video and digital IP video over a single coaxial cable.

The TW3811 is the receiving end of a SLOC link, converting the single SLOC signal on the coaxial cable back to separate Ethernet digital video data and analog CVBS video. It can be embedded into a DVR to enable one or more SLOC inputs or configured as a stand-alone SLOC-to-IP+CVBS converter.

The TW3811 includes an AFE, digital modem, and two Ethernet MII/RMII interfaces. The device accepts a SLOC output signal from a SLOC transmitter and decodes it into an analog CVBS signal and an Ethernet MII signal.

Applications

- Single-Channel SLOC receiver modern
- Multi-Channel SLOC receiver modem
- Embedded DVR

Features

- Simultaneous transmission of IP video data and analog CVBS video over up to 500m of RG59 coaxial cable
- · Analog CVBS video preview support
- Proprietary adaptive analog equalizer for extending the reach of CVBS video
- Proprietary SLOC-based IP camera detection
- Creates a full-duplex 100BASE-T digital link
- 36Mbps downlink speed from TW3801 to TW3811
- 4Mbps uplink for SLOC compliance
- Ethernet MAC MII/RMII interface for interfacing to DVR/NVR network processor SoC
- Optional Ethernet PHY MII/RMII interface for interfacing to external Ethernet PHY chip
- I²C 2-wire control interface
- Integrated PLL with 25MHz crystal interface
- 1.8V, 3.3V supplies
- 100-TQFP (12x12mm) Package



Simplified Application Schematic



Application Block Diagram

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