

Security Link Over Coax™ (SLOC™) Transmitter

TW3801

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 TW3801 is the transmitting (“camera”) end of a SLOC link, combining Ethernet digital video data and analog CVBS video into a single SLOC signal that can be transmitted over 500m of coaxial cable. It can be embedded into a camera or configured as a stand-alone IP+CVBS-to-SLOC converter.

The TW3801 includes an AFE, digital modem, and two Ethernet MII/RMII interfaces. The device accepts an analog CVBS signal and an Ethernet (R)MII signal and encodes it into a SLOC signal.

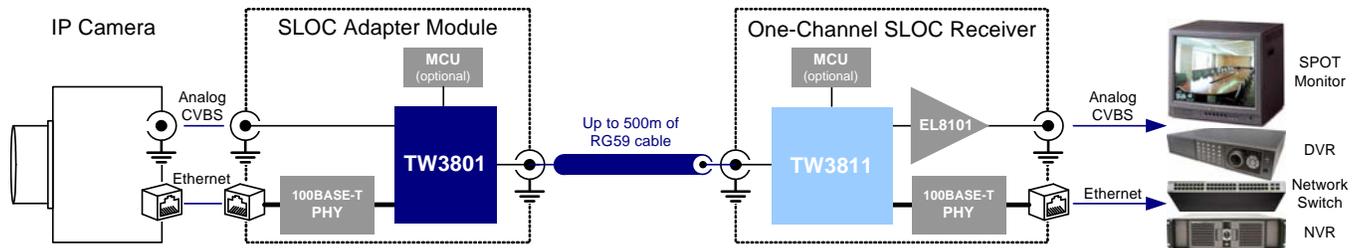
Applications

- Single-channel SLOC transmitter modem
- Embedded SLOC camera modem

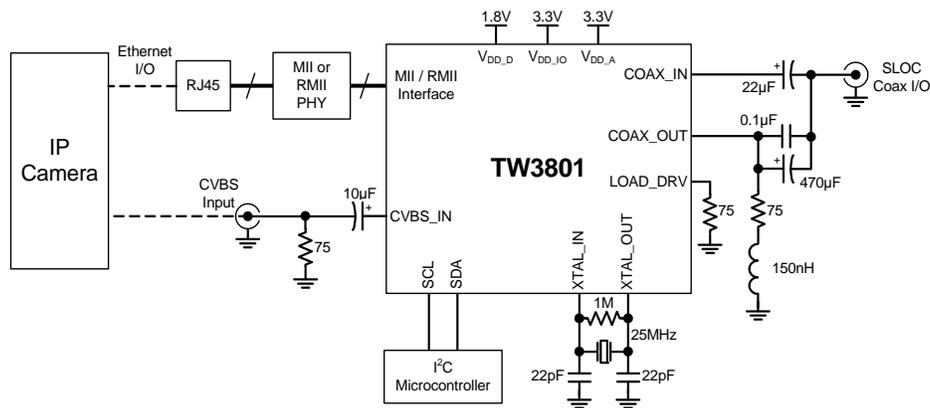
Features

- 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 DVR 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 Camera ISPs
- Ethernet PHY MII/RMII interface for interfacing to Ethernet PHY chip
- I²C 2-wire control interface
- Integrated PLL with 25MHz crystal interface
- 1.8V, 3.3V supplies
- 100-TQFP (12mmx12mm) Package

Application Block Diagram



Simplified Application Schematic



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