



## SiI 1169 PanelLink Receiver



### Applications

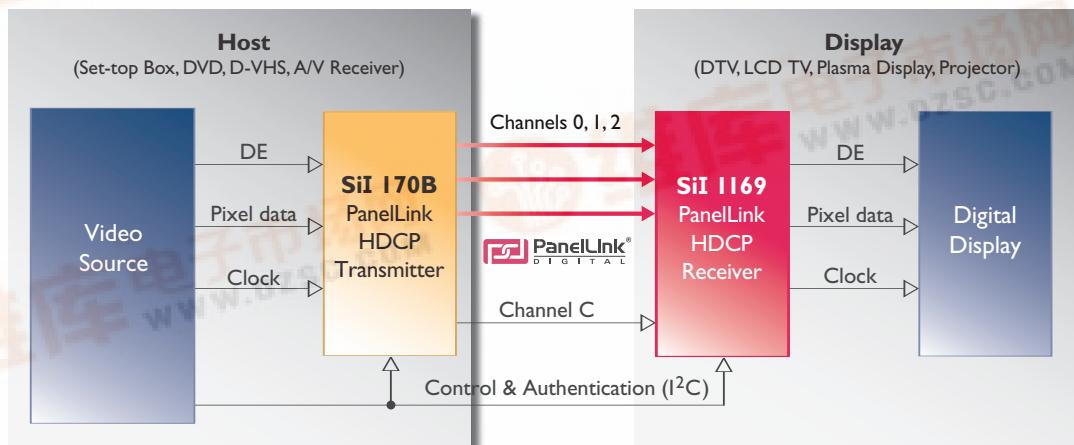
- LCD Monitors
- Projectors
- Digital TVs
- Plasma Displays
- LCD TVs

Silicon Image's most advanced DVI receiver, the SiI 1169™ enables the easy and low-cost addition of the DVI-HDCP interface to LCD monitors, projectors, digital televisions (DTVs), plasma displays and LCD TVs. With the DVI-compliant SiI 1169, displays can realize consistently high image quality while receiving premium video content encrypted with High-bandwidth Digital Content Protection (HDCP). HDCP has received support from major Hollywood studios. Integrated, pre-programmed HDCP keys significantly simplify manufacturing while providing the highest level of security. With a full DVI single-link bandwidth of 25-165MHz, the SiI 1169 supports all HDTV resolutions (720p/1080i/1080p) and PC resolutions up to UXGA. The SiI 1169 offers high jitter tolerance and efficient power management and is based on an innovative and new scalable PLL architecture that enables interoperability with a broader range of DVI transmitters. A new programmable equalizer takes the SiI 1169 to unprecedented performance levels over longer cable lengths.

Two SiI 1169 receivers may be used together to support dual-link applications. Synchronization circuitry coordinates data output between the two parts. This flexible design allows one circuit board to serve for both single- and dual-link applications, populating the second SiI 1169 receiver when needed.

All these features and benefits are provided in a 100-pin TQFP package that is backward compatible with the SiI 161B, SiI 169, SiI 1161 and SiI 163B PanelLink® receivers.

The SiI 1169 allows DTV manufacturers to quickly and easily integrate the DVI-HDCP interface into their advanced digital products. By supporting HDCP for DVI now, new applications in display security can be realized that enable viewing of premium video content.



## SiI 1169 Features

### PanelLink<sup>®</sup> Receiver

#### General

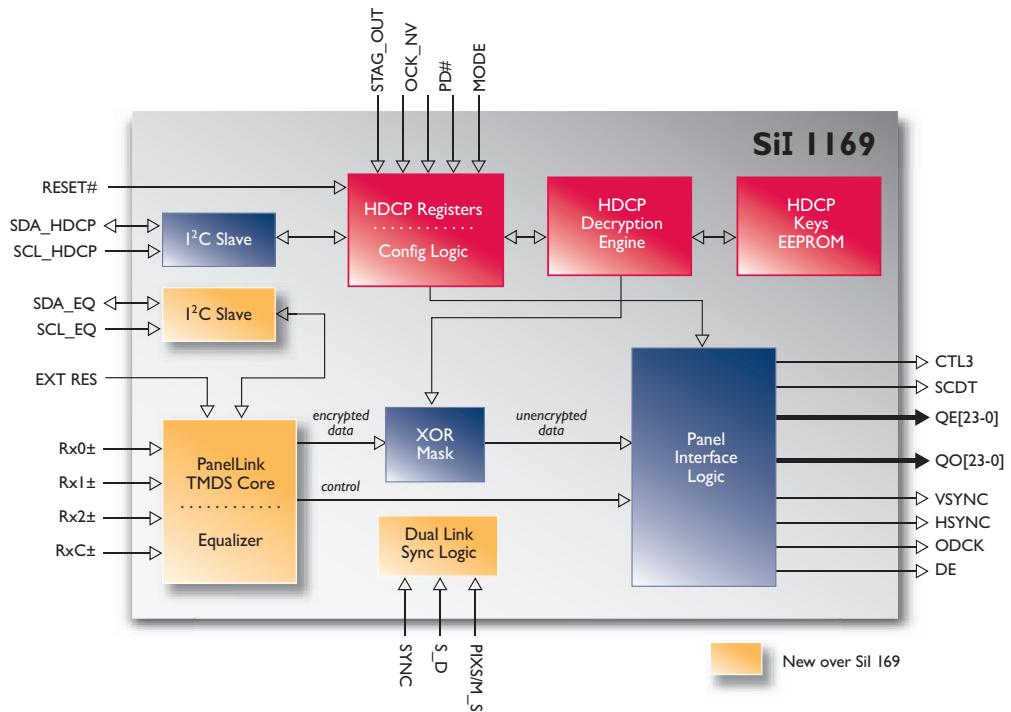
- Provides a consistent, high-quality digital visual experience
- Improves image focus, convergence and geometry
- Interoperates with a broad range of DVI transmitters, including all DVI-compliant transmitters
- Programmable equalizer supports long cable lengths beyond 10m with twisted-pair; fiber-optics ready
- Dual-link support up to 270MHz
- Cost-effective, easy-to-implement architecture for DVI-compliant LCD monitors, projectors, DTVs, plasma displays and LCD TVs
- 100-pin TQFP package

#### Input

- PanelLink Digital receiver for proven DVI compatibility
- Supports DVI input from 25-165MHz
- Supports High-bandwidth Digital Content Protection (HDCP)

#### Output

- Supports PC resolutions up to UXGA
- Supports 480p/720p/1080i/1080p HDTV resolutions
- 24-bit (1-pixel clock) or 48-bit (2-pixel clock) output



#### Power Management

- Supports DVI and VESA<sup>®</sup> DPMS<sup>™</sup> power management functionality
- Low standby power-consumption to meet energy conservation requirements

#### Easy to Use

- Pre-programmed internal HDCP keys simplify manufacturing, providing most secure solution and lowering cost
- Enhanced, robust input jitter-tolerance
- Backward compatible with SiI 161B, SiI 169, SiI 1161 and SiI 163B

The CPI169Dual Starter Kit includes hardware and documentation for dual-link monitor designs.

#### Contents include:

##### Hardware

- SiI 1169 evaluation board
- Interface cables

##### Documentation

- SiI 1169 Starter Kit User's Guide
- SiI 1169 Data Sheet
- SiI 1169 Evaluation Board Schematics
- SiI 1169 Bill of materials (BOM)

## Silicon Image's SiI 1169 Starter Kit

The CPI169DVI Starter Kit includes hardware and documentation to quickly design and launch a DVI-compliant LCD monitor, projector, DTV, plasma display or LCD TV with HDCP.

Part Number - **SiI1169CTU**



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