EZlink[tm] Data/Video Processor **(Preliminary)**

Front View

Back View

HOTLink® to raster PC video and HOTLink to USB data conversion

HOTLink input rates per standard and high speed HOTLink data rates (up to 400 MBits/sec)

User-configurable as 1U rackmount or benchtop unit

Configuration utility supports user-defined:

- √ **Frame, line, data, and special characters**
- √ **Programmable video formats (color and monochrome) for incoming HOTLink data**
- √ **Programmable output raster video timing**
- √ **Input area area of interest can be mapped to any desired output area-of-interest within output video timing, with shrink and zoom capabilities**

Available API for PC capture of USB data

The EZlink[tm] Data/Video Processor accepts HOTLink® encoded video and converts it to a programmable raster video format for display on a standard computer monitor. In addition, the in-coming HOTLink data is output real-time, (byte for byte) via the USB interface. A supplied software API is useful for capturing the USB data in PC applications.

This unique combination of both video and data conversion makes the EZlink essential support equipment for systems using HOTLink interfaces.

For video applications, EZlink supports output frame rates that are independent of the in-coming HOTLink frame rate. Output frame rates programmed to be faster than the input frame rate will result in repeated frames. Output frame rates programmed to be slower than the input frame rate will result in dropped frames.

Features: Based on state-of-the-art image processing technology, the EZlink capabilities include:

- Decoding of serial data transmitted via the HOTLink electrical format
- Programmable HOTLink video formats generation of monitor (DVI, RGB) video
- independent horizontal and vertical scaling
- programmable output image position within larger background area
- socketed HOTLink receivers support Standard speed or High Speed versions
- PC-based API allows capture of USB data for PC applications
- transformer-coupled Triax or BNC input connectors
- socket for factory-installed receiver oscillator, for finely matched receiver operation
- programmable clock generator supports different HOTLink receiver rates
- remote interface for both set-up and operational control
- set up parameters include special characters, output timing formats, and more

How to get started

HOTLink is used in many specialty applications for high speed transfer of data via a single coax or triax cable. HOTLink defines a 8B/10B physical layer with special characters, but the protocol layer is left undefined, thereby giving system designers leeway in choosing a protocol that suits a particular application.

EZlink has parameterized many of the techniques used in HOTLink systems. For example, the EZlink can be programmed to define frame, line, and other special characters. Data formats are also programmable, such as color depths up to 16 bit for monochrome data or 8 bits each of Red, Green, and Blue.

Most protocols will require some additional state machine support within the EZlink. This is not a problem! Our application engineers will work with you to determine the best way to make EZlink work for you!

Please contact us at (636) 300-5164. We will be happy to discuss your application.

HOTLink® is a registered trademark of Cypress Corporation

4 Research Park Drive, St. Charles, MO 63304 USA • http://www.westardisplaytechnologies.com • 636-300-5100 • FAX 636-300-5105 Jan 2008

Copyright © 2008, Westar Display Technologies, Inc. • Trademarks are property of their respective owners

Ordering Identification

EZlink is delivered in a benchtop configuration (with feet). If you need a rackmount unit, you may remove the feet and install the included rackmount ears.

The EZlink is ordered as follows:

EZlink-B ; EZlink with BNC input connector
EZlink-T ; EZlink with triax input connector

A "-HS" may be added to either configuration for the High Speed HOTLink version which supports bit rates up to 400 Mbits/sec.

EZlink[tm] Specifications

Input Specifications (Subject to change without notice)		
	Video Type	HotLink encoded video
	Byte Rate	Up to 33 Mbytes/sec standard (330MBits/sec) –HS up to 40 MByte/sec (400 MBits/sec) User defined line, frame, and special characters Programmable clocks per line and Lines per frame
	Connectors	BNC or Triax, per customer ordered configuration Transformer-coupled to HOTLink receiver
Raster Video Output Specifications		
	Video Type	Standard: Analog RGB (0.7 Volt levels, Interlaced or Non-Interlaced), TMDS
	Pixel Rate	Up to 162 MHz
	Clocks per Line	Up to 4096
	Lines per frame	Up to 2048
	Sync Type	HV, Composite Sync, or Sync-on-Green
	Connectors	DVI-I connector for Analog RGB, TMDS (DVI to HD15 adapters included in delivery)
USB Data Output Specifications		Supports USB 2.0 rates Supports a video frame transfer protocol, for real-time PC-based video capture and display. Other transfer protocols available. Please contact the factory
Electro Mechanical		
	Input Power	IEC Connector, 100-240 VAC, 47-63 Hz, less than 60 Watts
	Control	RS-232 and USB
	Size	Rackmount config: 19"W x 8.5"D x 1.75"H, Benchtop config: 17.4"W x 8.5"D x 2.12"H
	Weight	Less than 5 lbs.
Control Ports		RS-232, USB
Warranty		One year
Functional	Specialty Features	Windowing, Programmable border colors
	Color processing depth	Raster up to 8 bits per color, USB up to 16 bits per color
Each EZlink delivery includes:		EZlink unit, (2) DVI to HD15 adapters, rackmount ears, and a CD containing the User's Guide, EZlink PC API, and EZlink Configure utility

HOTLink® is a registered trademark of Cypress Corporation

4 Research Park Drive, St. Charles, MO 63304 USA • http://www.westardisplaytechnologies.com • 636-300-5100 • FAX 636-300-5105 Jan 2008

Copyright © 2008, Westar Display Technologies, Inc. • Trademarks are property of their respective owners