ZLAN-271



Application Note

Description

The ZLE8816 evaluation board provides a quick and easy method for evaluating the MT8816 8 x 16 Analog Switch Array for video switching in the 44 Lead TQFP package.

The evaluation platform includes a populated PCB, a CD containing software for programming the MT8816 from a PC and product data sheets.

Operation and channel selection is easily accomplished by using the USB port. manual

Features

- Emulates a complete 16 x 8 video switcher
- Simple and easy to use
- PC controlled channel selection

Ordering Information					
Part Number	Description	Package Supported			
ZLE8816BADA	Evaluation Card for 16 x 8 Cross-point Switch	MT8816AF1			

- Optional simple manual control with no PC required
- · Configured for buffed inputs and buffed outputs
- Configured for 75 Ω environments

Applications

- Video switches and routers
- · Security systems
- Video Conferencing

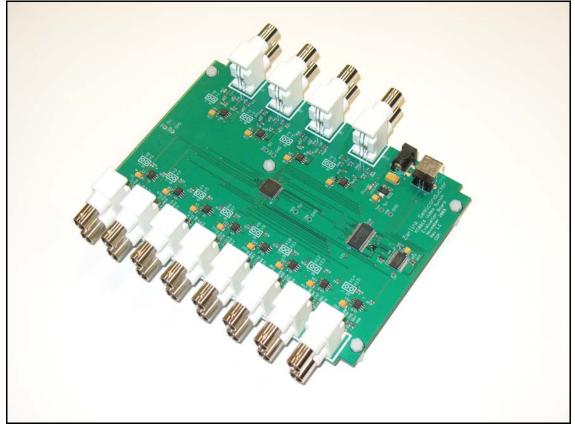


Figure 1 - ZLE8816 Evaluation Board

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June 2010

Functional Block Diagram

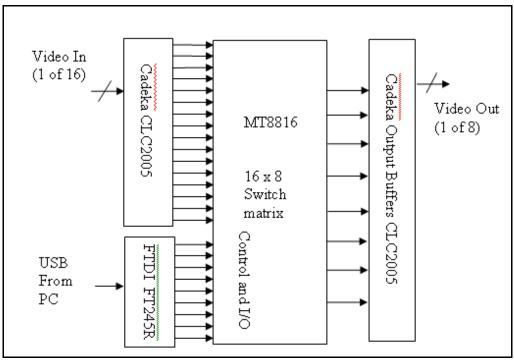


Figure 2 - Functional Block Diagram

Functional Description

The functional block diagram illustrates the major components of the evaluation board.

In the center is the MT8816, a 16 x 8 analog cross-point IC. At the left are 16 video input buffers from Cadeka (CLC2005). At the right hand side are 8 video output buffers from Cadeka (CLC2005) and each buffer is capable of driving a 75 Ω video load directly. BNC connectors are provided for all video inputs and video outputs.

A FT245R USB FIFO from Future Technology Devices International (FTDI) provides a standard USB interface for a PC. Through this USB connection the PC controls the programming of the evaluation board.

Instruction

Install the software drivers and the Video Switch .exe in the same directory.

Click on the Video Switch ICON and the following GUI will appear.

GUI Interface

	MT8816 Video Switch Demo Board Version 2.7					X
Camera 2 (C2) [Seen] Monitor 0 (10) Ma Camera 3 (C3) [Seen] Monitor 1 (11) Ma Camera 5 (C5) [Seen] Monitor 2 (C2) Ma Camera 5 (C5) [Seen] Monitor 3 (C3) Ma Camera 9 (C7) [Seen] Monitor 5 (C5) Ma Camera 9 (C4) [Seen] Monitor 5 (C5) Ma Camera 10 (C1) [Seen] Monitor 7 (C7) [With Camera 13 (C13) [See] Monitor 7 (C7) [With Camera 15 (C15) [See] [See]] Monitor 7 (C7) [See]]	Camera 0 (X0)					
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The 8 output monitors can select the video source from 1 of the 16 cameras as input by the pull down menu.

A write action completes the selection.

To disconnect, the disable option should be used for any connections selected.

The 'Reset all' button will clear all connections. Please see the MT8816 data sheet at the following link http://www.zarlink.com/zarlink/hs/82_MT8816.htm for further detail.



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