MXC-E8860-MVHD

WOLF
ADVANCED TECHNOLOGY

VIDEO CAPTURE / DISPLAY MODULE WITH HD-SDI I/O AND ANALOG CAPTURE

Key Features

- AMD Radeon™ E8860 GPU
- 768 GFLOPs single precision
  48 GFLOPs double precision
- Inputs:
  - ☐ 2 independent digital HD-SDI inputs
    SMPTE-292M, 1920×1080 @ 30Hz
  - ☐ 2 independent analog NTSC/PAL/SECAM inputs

Additional Features

- Outputs:
  - ☐ Up to 6 independent digital outputs:
    HD-SDI, DisplayPort 1.2, HDMI 1.4, Dual-Link
    DVI-D, LVDS, SVGA (RGBHV)
  - ☐ Maximum of 2 simultaneous HD-SDI outputs
    SMPTE-292M, 1920×1080 @ 30Hz
  - ☐ Maximum of 2 simultaneous legacy outputs:
    HDMI, DVI-D, SVGA (RGBHV)
- PCIe Gen2 x8
- 2GB GDDR5 128-bit RAM
- OpenCL 1.2, DirectCompute 11
- Advanced power management, enabling
  dynamic real-time control as low as 10 Watts
- Long-life support

Specifications

- High level of ruggedization
  - ☐ MIL-STD-810, IPC 6012 Class-3
  - ☐ -40° to +85°C operating temperature
  - ☐ 40g, 11ms shock
  - ☐ $0.2g^2$/Hz@ 5 - 2000Hz vibration
- Linux drivers
- VxWorks, Integrity, LynxOS, and other RTOS
  drivers available
- Form Factor: MXC Type-B
- Dimensions: 85×110 mm
- 3U VPX platform also available

Overview

The MXC-E8860-MVHD is a capture and display mezzanine card. The card can simultaneously capture four raw data streams: two HD-SDI, and two NTSC/PAL/SECAM; and drive up to six independent digital displays with HD-SDI, DisplayPort, DVI-D, LVDS or SVGA (RGBHV).

The E8860 embedded discrete GPU from AMD provides performance enhancement technology for GPGPU parallel processing with OpenCL and graphics acceleration with OpenGL. It supports up to six digital outputs and one analog output. The GPU is dynamically configurable for many power and performance requirements.

MXC (Modular Expansion Cards) provides video processing and display capability for extreme rugged air or conduction cooled applications. The rugged MXC interconnect provides up to 10Gbps signal integrity, excellent MIL-STD-810 performance and a dedicated video processing pin map.

The MXC-E8860-MVHD is for use in harsh environments and is well suited for Aerospace & Defense applications.