



Now Shipping with Support
for Object Video OnBoard
Intelligent Video Suite

Axeon Analytix

PCI and PCI Express video capture boards

Family of Multi-DSP Products for Real-Time Video Analytics Applications

Axeon Analytix is a family of multi-processor PCI boards specifically designed for video analytics applications. Axeon Analytix is a unique solution for adding video analytics to new or existing DVRs. With up to four Texas Instruments DM642 processors, Axeon Analytix products perform the video processing onboard without the need for host system processor intervention, allowing existing applications to stay intact. All Axeon Analytix products support the ObjectVideo OnBoard Software Suite for embedded video processing. No application development is necessary for immediate results.

Axeon Analytix Features

- PCI add-in card
- Real-time video capture and processing
- Easy integrates into new or existing DVRs
- Up to four Texas Instruments DM642 Digital Media Processors
- Up to eight channels of video processing for video analytics applications
- No host processor usage
- 256 MB SDRAM Frame Buffer
- CCIR viewing and capture resolution
- NTSC and PAL video formats
- Multiple board installation support
- Selectable video terminations
- 8 General purpose I/O triggers
- Windows® 2000, and XP support
- Optional SDK with sample applications

Axeon Analytix Products

Analytix 200

- Single Processor
- Two video processing channels



No Host System Processor Usage

With traditional analog DVRs, video data is passed to the system via a video streaming card. This video streaming card digitizes the incoming camera video and transfers the digital data to the host processor where it can be further manipulated. Depending on the system interface type, hundreds of megabytes of video data may need to be sent to system memory for host processing such as compression and storage. In these systems, adding video analytics algorithms to an already taxed system can cause instability. Axeon Analytix eliminates this problem by performing all processing on board. Since all processing is done on the Axeon Analytix, the host processor of the DVR does not need to intervene. This allows the existing DVR application to be unaffected by the analytics routines running on the DM642 processors.

Remote Access

Axeon Analytix can be installed in either a standalone DVR or in a networked configuration. Accessing the Axeon Analytix remotely is provided by the Analytix Communication Provider. This software allows for the analytics data and accompanying video to be viewed by a client machine over a TCP/IP network.

Secure Location

Axeon Analytix is designed to be installed "in the box" at the central server or individual DVR unit. This provides a more secure physical location of the analytics device rather than with using edge devices such as an intelligent camera or IP converter.

Reduced Cost

By putting the analytics in the DVR or server, per channel costs are reduced since each DM642 can accommodate two channels of real-time video processing. The four Texas Instruments DM642 video processors on the Analytix 800 can accommodate eight channels of real-time embedded video analytics.

Expandability

Adding additional channels of video analytics is possible by simply installing additional Axeon Analytix boards. Users can choose to use only part of the available video inputs on a particular Axeon Analytix model for analytics and activate those channels at a later time.

Easy Integration

Integrating the Axeon Analytix into a DVR is simple. Video can be connected externally through BNC connectors on the bracket or internally through a video header connector. If the BNC connectors are used, an available BNC Expansion Bracket is used for the additional four inputs of the Axeon 800. Axeon Analytix products also provide selectable video terminations per camera input for flexibility in system configuration. Users can select to loop video through the Axeon Analytix or select to terminate. The termination switch will provide the 75Ω impedance needed for proper video levels.

Available Software Integration

dDeveloper is a comprehensive software developers kit that supports all dPict Imaging products, allowing for easy porting to new hardware. dDeveloper is royalty free and runs under Microsoft Windows 2000 and XP operating systems. Source code samples and complete documentation are included in Visual C, C#, and Visual Basic .NET to provide insight to various hardware functions.

Specifications

Form Factor

- PCI form factor
- PCI 2.2 compliant, 5V and 3.3V universal slot

Video Input and Digitization

- Up to eight composite video inputs
- NTSC (M, 4.43), PAL (B, D, G, H, I, M, N), and SECAM (B, D, G, K, K1, L) support
- Simultaneous color or monochrome support
- High-quality 9-bit video digitization
- ITU-601 resolution viewing and capture
- Software programmable control of gain, offset, hue, saturation, and sharpness

Video Processing

- Texas Instruments DM642-600 MHz video processor
- Up to eight simultaneous channels of video processing
- Fully independent configuration of frame rate and resolution per channel
- Smooth interpolated video scaling to randomly-sized windows
- Bus-mastering video transfers to system memory, overlay, or display memory simultaneously.
- Hardware overlay of graphics over video
- RGB 32/24/16/15/8 and YUV 4:2:2 pixel formats
- Area of interest transfers to on-board and system memory
- 256 MB SDRAM frame buffer
- Extensive interrupt control for robust capture

I/O Triggers

- 8 programmable general-purpose I/O triggers
- Configurable as inputs or outputs

I/O Control

- Switchable video terminations per input
- EEPROM for storing configuration and view settings

Physical and Environmental

- Analytix 200 - 6.00" (length) x 4.20" (height)
- Analytix 800 - 10.00" (length) x 4.20" (height)
- Operating temperature: 0° C to 55° C
- Relative humidity: 5% up to 95% non-condensing

Available Software Developers Kit

- Compatible with dDeveloper SDK
- Windows® 2000 and XP DLLs
- Extensive documentation and sample code

Ordering Information

- Axeon Analytix 200 PCI: 10041-001
- Axeon Analytix 200 PCI Express: 10042-001
- Axeon Analytix 800 PCI: 10071-001
- Analytix Video Expansion Bracket: 99020
- dDeveloper Foundation SDK: 90010

Supports ObjectVideo OnBoard 5.0

- Object detection, classification and tracking
- Rule-specific intelligence
- Event Counting Suite
- Flexible features sets
- Easy upgrade path



For more information on ObjectVideo OnBoard, visit www.objectvideo.com.

ObjectVideo®



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