GEVA 300 Vision Controller



Benefits

- Expandable camera solution drives down system cost
- Supports GigE area cameras with mono or color sensors
- Multi-core processor supports demanding applications
- Dedicated interfaces for setup and runtime control
- Choice of application software to suit user need and experience
- Full complement of vision capabilities and factory communication options
- Small form factor, fanless enclosure

Overview

Multi Camera Vision Controller

GEVA 300 is a compact industrial controller that offers excellent performance for cost sensitive vision applications that need to inspect multiple features of a part or assembly. GEVA 300 leverages expandable Gigabit Ethernet camera technology to significantly drive system costs down.

GEVA 300 is equipped with a low power, dual core processor and high-speed system resources to effectively manage multi-camera acquisition and processing. Each of the six (6) Gigabit compliant Ethernet ports internally connect through independent data ports to alleviate bandwidth bottlenecks often associated with multi-camera acquisition. Each network port can be configured for either camera or network use and each can be expanded using external switches to accommodate larger camera network configurations. GEVA 300 network ports are compatible with a wide range of high and low resolution, mono or color area scan GigE cameras.

In addition to Ethernet, GEVA 300 provides standard external interfaces for system integration, including display, 3 USB ports and a serial port. Camera triggering, I/O and lighting control are supported using a companion breakout module. The PL-USB module provides an easy and safe way to connect factory I/O to the GEVA 300 and associated cameras.

Vision solutions on GEVA 300 are setup using TELEDYNE DALSA's iNspect Express or Sherlock application software. The iNspect Express software is easy to use and requires little or no prior vision experience, while the Sherlock software offers greater flexibility to tackle more challenging inspection tasks. Both packages offer a full complement of tools, with interfacing and control options for both users and equipment. For performance migration, applications built on other TELEDYNE DALSA equipment with the same camera setup will also run on GEVA 300.

Fully functional software emulators are installed on GEVA to allows users to develop or debug applications offline. The emulator maximizes machine up time during application development and maintenance.



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Specifications

- Storage: 40GB SSD
- Program: 2GB
- CPU: 1.8 Ghz Dual Core
- OS: Windows 7 Embedded
- Camera/Network Ports: GigE x6
- Serial Communication: USB 2.0 (x3), RS232
- I/O: 8 IN/12 OUT via PL-USB companion module
- Display: VGA to QXGA (2048x1536/75Hz)
- Power: 12V (50W) via supplied adapter
- Temp: 0-40C Operating
- Cooling: Fanless via passive heatsink
- Size: 200x42x144 mm
- Mount: DIN rail
- Certifications: CE, FCC Class A, RoHS

Application Software Choices

iNspect Express

iNspect Express offers a simple point and click interface that allows users to rapidly setup and deploy vision solutions. iNspect's logical navigation and practical features appeal to both experienced and new users alike.



Sherlock

Sherlock offers additional flexibility and advanced features for tackling challenging applications. Sherlock's programmability appeals to more experienced vision integrators, allowing mixing of camera technolgies within the same application, advanced scripting and GUI customization.



General

Both software products offer a full suite of vision

tools and capabilities to satisfy a broad range of automated tasks.

PL-USB

The PL-USB is an external I/O module for the GV 300 or an industrial PC running Teledyne DALSA software with Genie cameras. It provides trigger and power to the connected Genie cameras as well as I/O for discrete application control. The PL-USB module simplifies hardware setup and provides a consistent I/O solution for iNspect Express and Sherlock application software. The product is DIN mountable and connects to the GV 300 through a single USB cable.

The PL-USB can support up to 4 Genie cameras in synchronous (triggered at the same time) or asynchronous (triggered independently) configurations.

Typical GV300 with PL-USB Configuration



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