# COGNEX

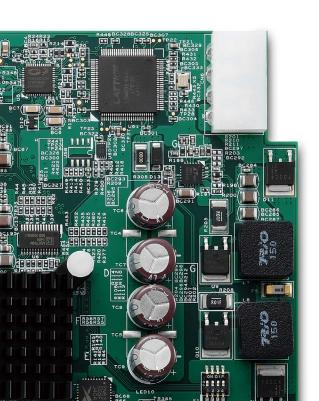
# CFG-8704e

# **4-CH PCI Express® GigE PoE Frame Grabber**

The CFG-8704e is designed to work with Cognex Designer™ Vision Software and VisionPro® Software. It can also be used as a stand-alone GigE interface card making it ideally suited to meet many machine vision application requirements.

The Cognex CFG-8704e frame grabber is a PCI Express® x4 lane, GigE, PoE (Power over Ethernet) frame grabber/network interface card which supports four independent Gigabit Ethernet ports for multiple GigE Vision device connections.

- · Trusted Cognex Brand
- Designed for Cognex Designer Vision Software and VisionPro Software
- · PCI Express x4 compliant
- 4 independent GigE Vision Ethernet ports with Power over Ethernet
- · Jumbo frames
- · Support for IEEE 802.3af for PoE
- · Security device for Cognex software license





#### **Software Development Environments**

**Cognex Designer** makes it faster to build complete vision applications and allows developers to more easily take full advantage of the powerful VisionPro tool library. A graphical, flow-chart-based programming environment results in a diagrammatic representation that allows for faster development cycles and easier application maintenance and support.

**VisionPro** Machine Vision Software is a suite of Cognex® software tools for the Microsoft® Visual Studio® .NET programming environment. VisionPro combines the power and flexibility of advanced programming with the ease of development using the integrated QuickBuild fast prototyping environment.

#### **Simplified Installation and Lower costs**

The CFG-8704e not only supports Power over Ethernet (PoE), combining power and signal supply into a single cable but also enables simultaneous multi-camera acquisition and data transfer rates of up to 1000Mb/s. This PoE solution simplifies system installation and lowers maintenance costs.

Extensible architecture allows the CFG-8704e to maintain support for existing cameras while easily adding new ones. From legacy cameras to the latest high-speed, color, GigE technology, the CFG-8704e meets many application requirements.

#### **Smart PoE Function**

The CFG-8704e provides auto-detection to ensure compatibility with both PoE and conventional non-PoE devices. The camera power is automatically on when the PoE connection is established. With the smart PoE function in the CFG-8704e, users can program power status easily, delivering significant energy efficiency, especially when cameras are idle.

#### **Features**

| PCI Express x4 compliant   | Up to 24 W PoE power supply from PCIe bus             |
|--|---|
| Support for 4 independent Gigabit Ethernet ports                       | Up to 24 W PoE power supply from PCIe bus             |
| Support for smart PoE function, enabling easy power status programming | Support for link aggregation/jumbo frames (9 KByte)   |
| LED indicating connectivity status                                     | Acts as a security device for Cognex software license |



## **Specifications**

| Dimensions                 | 145 wide x 111.12 length (mm);<br>5.71 x 4.38 (in)  |
|----------------------------|---|
| Operating Temperature      | 0°C to 55°C   |
| Storage                    | -40°C to 85°C   |
| Input voltage              | 3.3 VDC and 12 VDC (w/PC system power)  |
| Input from power connector | Max 7 A @ 12 VDC (supporting up to 4 ports at 15.4 W per PoE port)                          |
| Input from PCIe slot       | Max 2.1 A @ 12 VDC (compatible to PCle spec), with connection cut off by fuse when exceeded |
| Max Output Power           | Max Output Power  |
| PoE Output Voltage         | 44 to 48 V, PoE port positive voltage feed  |

# **GigE Vision**

| LAN chip          | Intel® 82574L | , PCle v1.1 (2.5GT/s) |
|-------------------|---------------|-----------------------|
| GiaF Vision Ports |               | 4                     |

# **PCI Express**

| PCIe X4 ports                            | 1 port PCle X4, for GigE Vision |
|--|---------------------------------|
| Differential Output Peak to Peak Voltage | +0.8 V to +1.2 V                |
| Differential Input Peak to Peak Voltage  | +0.175 V to +1.2 V              |
| Input voltage for PERST#, WAKE#, and SM  | Bus0.75 V to +4.05 V            |

Cognex Designer makes it faster to build complete vision applications and allows developers to more easily take full advantage of the powerful VisionPro® tool library. Learn more at www.cognex.com/products/machine-vision/cognexdesigner-vision-software

VisionPro® software provides a complete, powerful vision tool library for the most challenging machine vision applications. Learn more at www.cognex.com/visionpro

### **Ordering Information:**

CFG-8704E-000 - card only, no software

CFG-8704E-100 - with VPro Plus and Cognex Designer CFG-8704E-200 - with VPro Max and Cognex Designer

Companies around the world rely on Cognex vision and ID to optimize quality, drive down costs and control traceability. Corporate Headquarters One Vision Drive Natick, MA 01760 USA Tel: +1 508 650 3000 Fax: +1 508 650 3344

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