iPORT™ SB-Pro IP Engines

Network your camera blocks from Sony with high-performance IP engines

Applications

- Military vetronics systems
- Medical imaging systems
- Intelligent traffic systems
- Industrial inspection systems

Features

- Transforms a block camera from Sony into a GigE Vision® and GeniCam™ compliant camera
- High-performance, up to 1080i at 30fps
- Video and camera control using a single cable
- Sony® VISCA™ camera control via GenICam interface
- Low, consistent latency

Compatibility

- Sony FCB-H11
- Sony FCB-EX E Series (coming soon)
- Sony FCB-EH Series (coming soon)

Transform camera blocks from Sony into GigE Vision® compliant cameras with Pleora's iPORT™ SB-Pro IP engines. Compact and simple to integrate, iPORT SB-Pro IP engines transmit high-definition video with low, predictable latency. Complete with feature control using the GenICam™ standard, these products are ideal for systems integrators looking to differentiate their offerings, increase interoperability, and introduce networking capabilities.

iPORT SB-Pro IP engines leverage the open GigE Vision and GenICam standards for communication over a Gigabit Ethernet link, which increases interoperability between products from different manufacturers, while dramatically lowering system cost and complexity. With Gigabit Ethernet, cabling distances of up to 100m can be achieved using standard CAT5/6 cabling; by incorporating common, off-the-shelf switches, distances can be unlimited. Decreased cable size, increased flexibility, and a tighter cable bend radius are additional benefits gained when using Gigabit Ethernet for video transfer.

SB-Pro IP engines abstract the Sony® VISCA™ protocol into an industry-standard GenICam interface over Ethernet. With video and control

signals existing on a single cable, system cost and complexity can be further decreased. GenICam compliant off-the-shelf software packages can be used to control the camera's zoom, focus, exposure settings, and more — without modification.

Able to transmit video at up to 1080i resolution at up to 30 frames per second with low, consistent latency, SB-Pro IP engines are available as compact, low-power OEM board sets designed for use in a variety of housings.

SB-Pro IP engines are built with connectors for power, general purpose inputs and outputs (GPIO) and serial communication, which allows for a simple connection to a block camera from Sony.

Compatible with Pleora's vDisplay™ video receivers, as well as Pleora's feature-rich application toolkit eBUS™ SDK, the iPORT SB-Pro enables the Sony family of block cameras to become part of complete networked video connectivity solution.

Pleora Technologies

iPORT™ SB-Pro IP Engines

Networked Video Connectivity Solutions

iPORT IP Engine	· Highly reliable, 1 Gb/s data transfer rate with low, end-to-end latency · OEM, in-camera board
eBUS SDK	· eBUS Universal Pro driver · Sample applications including NetCommand, a demonstration of multi-device network connectivity · Driver installation tool · Documentation
GigE Vision	· Fully-compliant firmware load · Guarantees delivery of all packets · Comprehensive data transfer diagnostics

Video Formats

Video acquisition	· Digital video interface (model-dependent)
Input resolutions	· 1920x1080i, 1440x1080i, 1280x720p, at up to 50 or 59.94Hz
Pixel formats	· Mono8, YUV 4:2:2
Deinterlacing support	· Weave and line duplication

Compatibility

Block Cameras	• Sony FCB-H11 • Sony FCB-EX E Series (coming soon) • Sony FCB-EH Series (coming soon)

Connectors

Power	· 12-pin Hirose connector for serial communication, GPIO, and power
Network	· RJ-45
Video interface	· Sony block camera (cable optionally included) · Power and command interface to Sony block camera (cable optionally included)

Networking Features

Gigabit Ethernet-based	· Low-cost, easy-to-use equipment · Compatible with 10/100/1000 Mb/s IP/Ethernet networks · Supports IEEE 802.3 (Ethernet), IP, IGMP v.2, UDP and ICMP (ping) · Long reach: 100 m point-to-point, further with Ethernet switches
Multicast capability	· Enables advanced distributed processing and control architectures

Characteristics

Size	· 25 mm X 42 mm X 69 mm (height X width X length of board set in brackets)
Operating temperature	· 0°C - 55°C
Power supply	· 6V - 12V
Power consumption	· 6.6 W (Typical, including block camera)