DATA SHEET

iPORT™ SB-Pro IP Engines

Network your block cameras 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, full-resolution images 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-EX1020, FCB-EX985E
- Sony FCB-EH6300

GiGE VISION

GEN<i>CAM

Transform block cameras 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 full resolution 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 (GigE) link, which increases interoperability between products from different manufacturers, while dramatically lowering system cost and complexity. With GigE, 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 GigE for video transfer.

System costs and complexity can be further decreased by having video and control signals existing on a single cable. iPORT SB-Pro IP engines abstract the Sony® VISCA™ protocol into an industry-standard GenICam interface over Ethernet. 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 full resolution video at up to 30 frames per second with low, consistent latency, iPORT SB-Pro IP engines are available as compact, low-power OEM board sets designed for use in a variety of housings.

iPORT 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.

*The iPORT SB-Pro IP engine is available in three models; each model has a number of variants, each with its own part number. For more information, contact Pleora or your channel partner.

For more information, visit
www.pleora.com/our-products/iport-video-transmitters/iport-sb-pro

Pleora Technologies

iPORT™ SB-Pro IP Engines

Networked Video Connectivity Solutions

iPORT™ IP Engines	• 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™ sample application, a demonstration of multi-device network connectivity • Driver installation tool • Documentation
GigE Vision®	• Fully-compatible firmware load • Guarantees delivery of all packets • Comprehensive data transfer diagnostics

Video Formats

Video acquisition	• Digital video interface (model-dependent)
Input resolutions	• Full resolution images • **Sony FCB-H11:** 1920x1080i, 1440x1080i, 1280x720p at up to 59.94Hz • **Sony FCB-EX1020, FCB-EX985E:** Up to 764x492 (NTSC) and/or 748x580 (PAL), model and pixel format dependent. • **Sony FCB-EH6300:** 1920x1080p and 1280x720p at up to 30Hz; 1920x1080i at up to 60Hz.
Pixel formats	• Mono8 • YUV 4:2:2 • YUV 4:1:1 (Sony FCB-EH6300 only)
Deinterlacing support	• Weave and line duplication (resolution dependent)

Compatibility*

Block Cameras	• Sony FCB-H11 • Sony FCB-EX1020, FCB-EX985E • Sony FCB-EH6300

Connectors

Power	• 12-pin Hirose connector for serial communication, GPIO, and power
Network	• RJ-45
Video interface	• Sony block camera (cable optional) • 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 (L x W x H)	• 69 mm X 42 mm X 25 mm
Operating temperature	• 0°C to 40°C (higher with thermal pad)
Storage temperature	• -40°C to 85°C
Power supply	• 6 V to 12 V
Power consumption (Typical, incl. block camera)	• **Sony FCB-H11:** 6.6 W • **Sony FCB-EX1020, FCB-EX985E:** 5 W • **Sony FCB-EH6300:** 7.2 W

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