carina
An EIZO Group Company

The world's first evolutional video camera system with expanded functions beyond the legacy.

Slot-In Camera

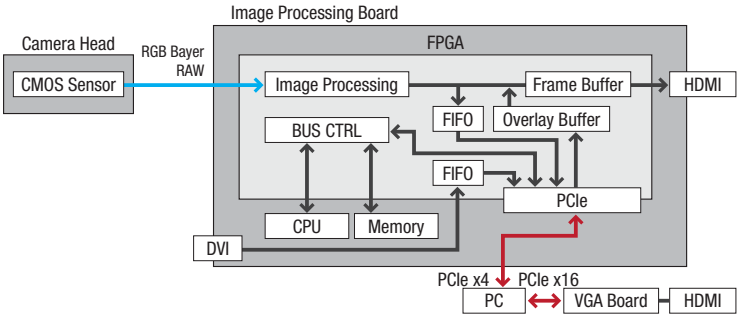
SXH-360 Series

- Enables the capture of video with a variety of resolutions, color depths, and frame rates.
- Provides high-speed direct data transfer with a very little delay between the image processing board and PC memory through PCI Express bus.
- A widely available twisted-pair cable can be used between the camera head and the image processing board.
- PC driver and camera control software included.

The Slot-In Camera SXH-360 is a next-generation camera system designed to work with a PC on the PCIe slot. The PC can control the camera in every detail and capture the video real-time with a very little delay. Since the video data goes to the PC memory directly, it is free from the restrictions of existing video formats. The resolution can go up to QVGA (2048×1536), and the frame rate can go up to 120 fps. The SXH-360 consists of a camera head with QXGA CMOS sensor and an image processing board. The camera head and the board are connected by widely available twisted-pair cable, up to a length of 100 m with optional 4 repeaters.

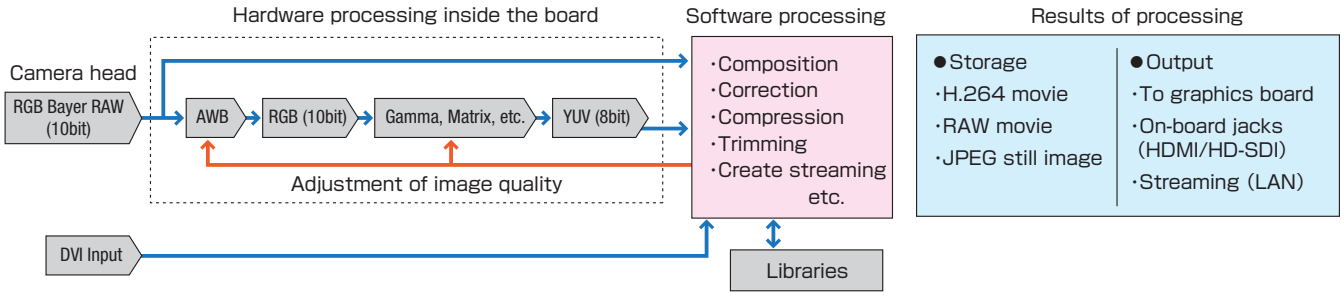
■Board design specific to video processing

Video processing is conducted on the board, which is connected directly to the PC via a PCI Express (4-lane) bus. Video data is transferred via 3-line FIFO to the PC memory and graphics board, so there is a very little delay on the monitor, and video output from onboard HDMI and HD-SDI terminals is possible.



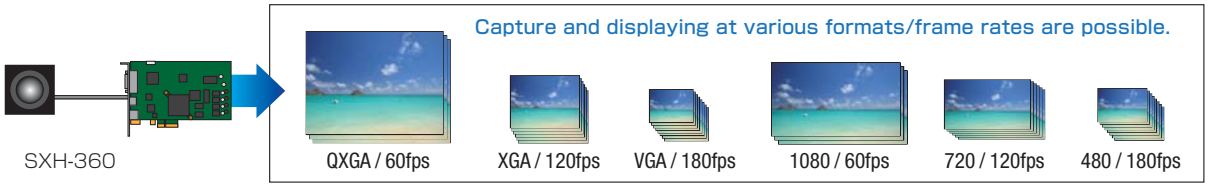
■Unlimited range of use through video processing on a PC

Combined PC software processing enables real-time video composition, compression, storage, display, and streaming, etc. In addition, it is possible to capture video images easily through the board's internal video processing step, as well as to capture the Bayer RGB RAW data at sensor resolution, then generate higher-resolution video and still images.



■Supports a variety of video formats

SXH-360 Series makes it possible to capture and display video images using a variety of video formats and frame rates, free from the restrictions of standard TV video signals.



■Driver and camera control software included

Driver and software for control of the basic camera functions from a PC are provided. In addition, H.264 compression, JPEG compression, and other high-level libraries are also available as option.

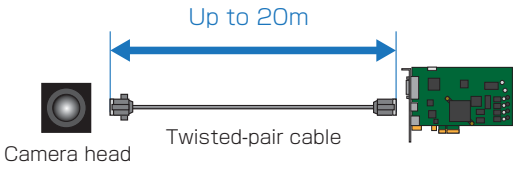
■A selection of camera heads to match the intended use

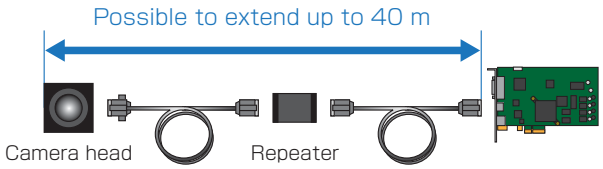
Utilizing the QXGA-compatible 1/2.8 SONY IMX036 for the CMOS sensor, the compact, 3.4 M pixels (valid pixels: 3.27M) camera head measures only 37 x 45 x 50 mm, and weighs only 120 g, allowing C mounting. In addition, camera head that contains a x20 zoom lens is coming soon. Camera head with C-mount flange back adjusting mechanism will be also available soon.

■Twisted-pair cable connection

A widely available twisted-pair cable (shielded Cat7 cable) is used to connect the camera head and the image processing board. Connection with a single cable is possible up to a length of 20 m. An optional repeater can be used to extend the length of the connection to a maximum length of 100 m. The repeater does not require any power supply. The connection can be extended up to 100 m with four more repeaters and two external power supply.

※Please use a twisted-pair cable for which proper function has been confirmed.





※ Maximum connection distance when using 4 repeaters (option): 100 m. Maximum single cable length: 20 m.

■Specifications

【Camera Head CH-360】

Imaging Device	Single CMOS / RGB Bayer
Total pixels	2144(H)×1588(V) (Approx. 3.4 megapixels)
Valid pixels	2096(H)×1561(V) (Approx. 3.27 megapixels)
Pixel size	2.5μm(H)×2.5μm(V)
Scanning area	1/2.8 type
Scanning system	Progressive
Sensitivity	F5.6 2000lx
Minimum Illumination	2.7lx (1/30 50IRE +24dB)
S/N	> 50dB(γ=1, Detail OFF)
Gain	Auto/Manual (0 to 24dB)
Setup-level	Variable
Electric shutter	1/2, 1/4, 1/8, 1/15, 1/30 (1/2~1/30 : Slow shutter) 1/60, 1/100, 1/250, 1/500, 1/1000, 1/10000
Image processing board connecting port	RJ45×1 (w/screw locking)
External dimensions	37.0(W)×45.0(H)×52.1(D)mm ※w/o tripod adaptor.
Weight	120g (0.26lbs) ※w/o tripod adaptor.

【Image Processing Board】

Interface	PCI Express x4
Scanning system	Progressive
Data transfer format	Uncompressed video (RGB Bayer RAW 10bit, RGB 10/8bit), YUV(8bit)
Camera head connecting port	RJ45×1 (w/screw locking)
OS	Microsoft Windows 7 32bit / 64bit
Video output Jacks on board	HDMI, HD-SDI, Composite video (NTSC/PAL)
Video resolution/frame rate	2048×1536@60fps, 1920×1080@60fps, 1600×1200@60fps, 1280×1024@60fps, 1280×720@120fps, 1024×768@120fps, 720×480@180fps, 640×480@180fps

※This product is under development and its specifications are subject to change without advance notice.

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