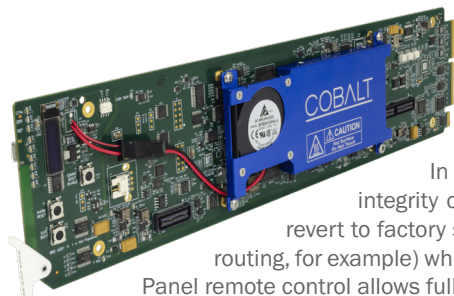


Sapphire BIDI-2H2S • 3G/HD/SD Bidirectional Dual Channel Converter

The **Sapphire BIDI-2H2S** is a dual channel bidirectional HDMI to SDI and SDI to HDMI Converter. Each channel can be independently configured to have either SDI or HDMI inputs and each channel has simultaneous SDI and HDMI outputs. This provides input and output options with independent paths of true 3G and HD conversions to and from all the SD-SDI, HD-SDI and 3G-SDI formats and HDMI. With both SDI and HDMI inputs and outputs (2 each), each path is equipped with frame sync as well as full input and output audio cross-points and optional per-path color correction. Input and output SDI and HDMI cross-points allow bidirectional program sourcing and distribution across the both sets of inputs and outputs.



In existing openGear® installations, the bidirectional capacity can save space and lend to installation integrity over using throwdown devices. Preset save/load allows saving custom card settings and instant revert to factory settings. Layered presets allow invoking changes related only to a specific area of concern (audio routing, for example) while not changing any other processing settings or aspects. Full user DashBoard™ or Remote Control Panel remote control allows full status and control access locally or across a standard Ethernet network.

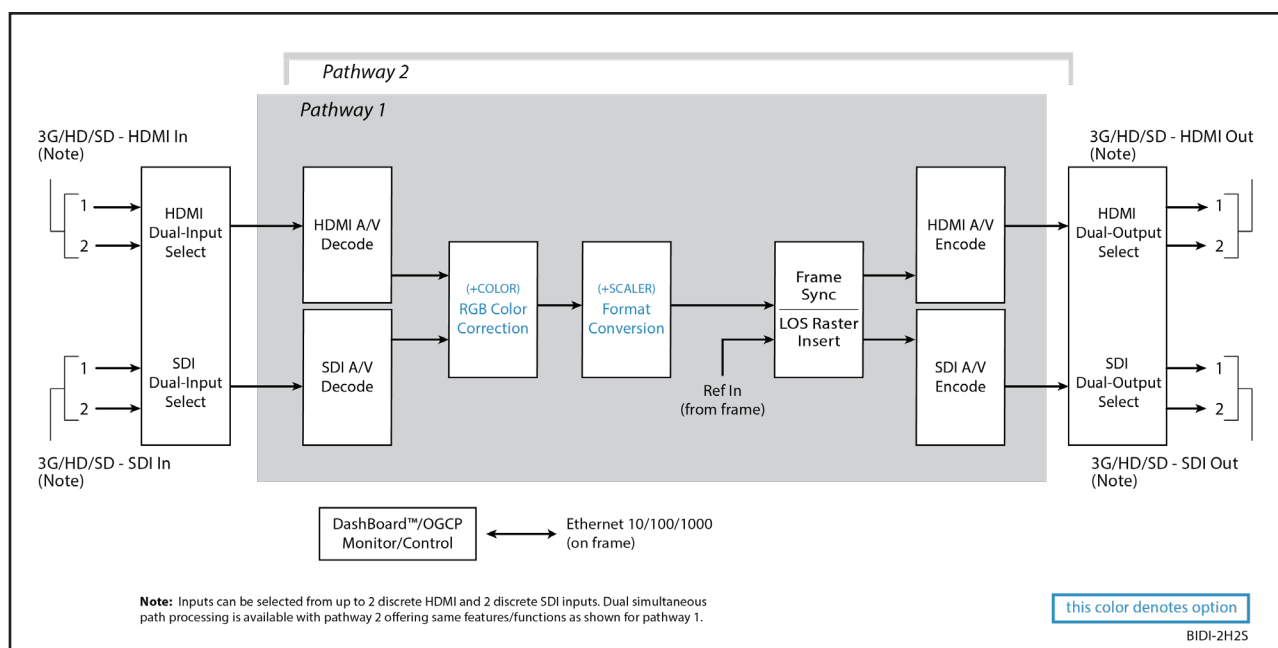
Features

Supports all popular formats: 480i, 576i, 720p, 1080i, 1080p and 1080PsF	Remote control/monitoring via DashBoard™ software or OGCP-9000 Remote Control Panel
Independent processing paths on a single openGear® card provides high capacity in openGear® environments	Hot-swappable
Each path equipped with frame sync with configurable manual or LOS-detect insertion of frozen frame or selectable-color flat-field. Optional per-path color correction.	Make Sapphire BIDI-2H2S into a standalone unit by using it with our BBG-1300-FR 1RU Enclosure for openGear® Cards standalone enclosure
Full input and output audio cross-points, including independent flex mix, stereo downmixers, and audio delay functions	Five year warranty
EDID Capture and Management	

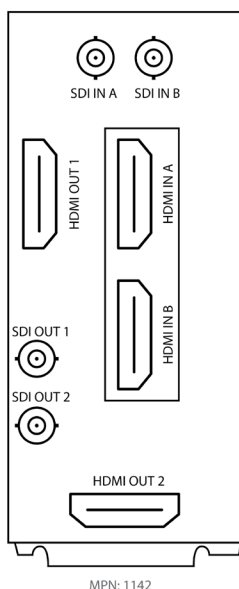
Options

Color Correction (+COLOR) – Provides full RGB color corrector (offset, gain, gamma) with extended YCbCr proc controls with white hard clip, white soft clip, black hard clip, and saturation clip.

Up/Down/Cross conversion (+SCALER) software option (per-path). Supports 59.94 <-> 60 conversion.



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Note: Due to the alignment of the card and this rear module, the combination of the card and rear module will consume the adjacent even frame slot in addition to the odd slot occupied by the card.

Note: Mates to card in odd slot.

Specifications

Note: All specifications are preliminary and subject to change.

Power 49 Watts	Standards Supported SMPTE 259M, 292M, 424M
HDMI Inputs (2) HDMI 2.0; Type A (standard) connectors	SDI Inputs 3G/HD/SD-SDI Inputs (2) 75Ω inputs
HDMI Outputs (2) HDMI 2.0; Type A (standard) connectors	SDI Outputs (2) 75Ω outputs Output Signal Level: 800 mV ±10% DC Offset: 0 V ± 50 mV Alignment Jitter (3G/HD/SD): < 0.3/0.2/0.2 UI
Frame Sync Audio/Video Delay Max offset: 20 frames Latency (min): 1 frame	User Audio Delay Offset from Video Bulk delay control: -33 msec to +3000 msec. Per-channel delay controls: -800 msec to +800 msec

Frame Reference Input

(2) reference from frame bus. SMPTE 170M/318M “Black Burst”, SMPTE 274M/296M “Tri-Level”

Note: Per-path frame reference offers independent per-path controls (such as video delay offset). However, all paths must be locked to the same selected reference selection (e.g., frame REF 2 used for each path).

Ordering Information

Sapphire BIDI-2H2S 3G/HD/SD Dual Channel Bidirectional HDMI to SDI and SDI to HDMI Converter

Rear Modules

RM20-BIDI-2H2S-B-HDBNC 20 Slot Frame Rear I/O Module (Standard Width) two HDMI Inputs, two HDMI Outputs, two SDI Inputs and two SDI Outputs

Options

+COLOR Color Correction Option (per-path based)

+SCALER Up/Down/Cross conversion software option (per-path). Supports 59.94 <-> 60 conversion

Note: Options denoted as “+” are software-based options which are available on new product when ordered or can be customer field-installed as a software upload upgrade. Unless otherwise noted, software options are per-card based. Options which are per-path based are identified as such.