

# ev670-X30-HW-V2

Virtualized Media Processing Platform



## Features & Benefits

- Modular and fits into ev1-FR, ev3-FR or ev6-FR
- Compatible with Evertz' SDVN solution
- Flexible high-density FPGA-accelerated compute blade
- Supports applications for up to 12G-SDI and IP, including gateways for SMPTE ST 2110, multiviewer and more
- 32x32 3G-SDI interface
- 6x 100GbE QSFP interfaces
- Support for SMPTE ST 2110 and NMOS IS-04/05
- high-density gateway up to 16x16 UHD or 32x32 3G
- high-density multiviewer for SDI, SMPTE ST 2110-20, ST 2110-22 and ST 2022-6 applications
- Easy to change functionality

The ev670-X30-HW-V2 is a next-generation virtualized media processing platform revolutionizing how media facilities are designed, enabling customers to move to an infrastructure that allows for essential core broadcast services to be applied on a generic hardware platform when required. This paradigm shift from discrete, fixed-function hardware to compute pools of generic hardware with licensable software services provides media companies a flexible, scalable and agile broadcast infrastructure to dynamically meet and adapt to changing facility requirements.

The ev670-X30-HW-V2 is an FPGA-accelerated compute blade that supports both 12G/3G/HD-SDI and IP interfaces. The ev670-X30-HW-V2 provides FPGA-based processing cores where a number of different types of applications (APPs) can be configured, providing services that include: multiviewers, gateway and video, audio and ancillary data processing functionality. As a future-proof, FPGA-based compute blade, ev670-X30-HW-V2 provides all the scalability and flexibility of a virtualized environment, while also ensuring low latency, low power and reliable real-time processing.

ev670-X30-HW-V2 utilizes Evertz' MAGNUM orchestration software to allow users to easily manage apps, licenses and the pool of compute resources. These software tools allow media companies to deploy the required applications (e.g. multiviewer,



# ev670-X30-HW-V2

## Virtualized Media Processing Platform

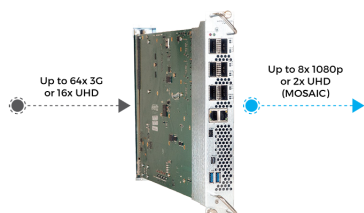


gateway or video/audio/ancillary processing) as needed. The ev670-X30-HW-V2 provides greater efficiency and utilization of compute resource with respect to fixed function devices or COTS-based hardware, allowing users to accomplish precisely what they need, when needed.

The ev670-X30-HW-V2 supports SNMP, IGMP, JSON, REST and NMOS IS-04/05 protocol. These interfaces provide seamless integration with Evertz' VUE user interface, MAGNUM, VistaLINK® PRO and third-party systems.

### ev670-X30-HW-V2 Applications (APPs)

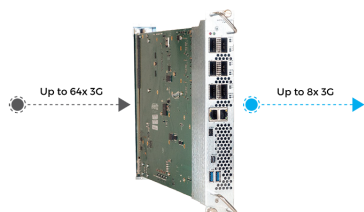
evVIP-APP-100G-ST2110



#### evVIP-APP-100G-ST2110

Standalone high-density multi-image display processor technology. Supports up to 64x 3G or up to 16x UHD SMPTE ST 2110 input signals and up to 8x 1080p or 2x UHD outputs over SMPTE ST 2110. Also provides SDI outputs, rear plate needs to be ordered separately.

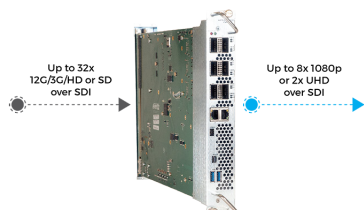
evVIP-APP-100G-ST2022-6



#### evVIP-APP-100G-ST2022-6

Standalone high-density multi-image display processor technology. Supports up to 64x 3G SMPTE ST 2022-6 input signals and up to 8x 1080p outputs over SMPTE ST 2022-6. Also provides SDI outputs, rear plate needs to be ordered separately.

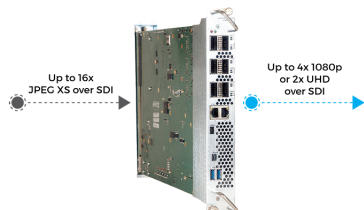
evVIP-APP-SDI



#### evVIP-APP-SDI

Standalone 12G-SDI multi-image display processor technology. Supports up to 32x 12G-SDI input signals and up to 8x 1080p or 2x UHD (12G-SDI) outputs. Full video, audio and ancillary monitoring.

evVIP-APP-JPEG-XS-SDI



#### evVIP-APP-JPEG-XS-SDI

Standalone high-density multi-image display processor technology. Supports up to 16x JPEG XS over SDI input signals and up to 4x 1080p or 2x UHD outputs over SDI. Optional advanced monitoring or standard monitoring. Rear plate needs to be ordered separately.

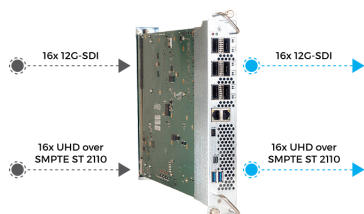
# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### ev670-X30-HW-V2 Applications continued

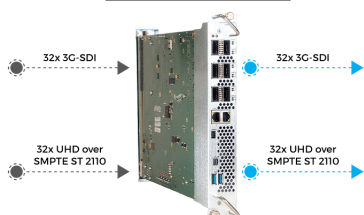
evIPG-12G



#### evIPG-12G

The IP Media Gateway (IPG) APP supports high-density 16x 12G-SDI to SMPTE ST 2110 encapsulation and de-encapsulation.

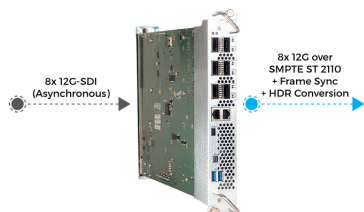
evIPG-3G



#### evIPG-3G

The IP Media Gateway (IPG) APP supports high-density 32x 3G-SDI to SMPTE ST 2110 encapsulation and de-encapsulation.

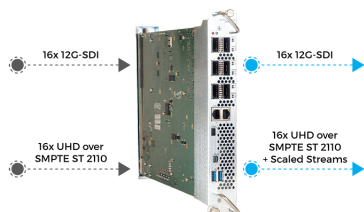
670IPG-X30-APP-8-FS-HDR



#### 670IPG-X30-APP-8-FS-HDR

The IP Media Gateway (IPG) APP supports frame synchronization of 8x asynchronous 12G-SDI inputs, 8x BBC LUT (HGL) color space conversions, SDR-HDR, and 8x SMPTE ST 2110 encapsulation (4K single essence). FS-evEDGE and HDR evEDGE licenses sold separately.

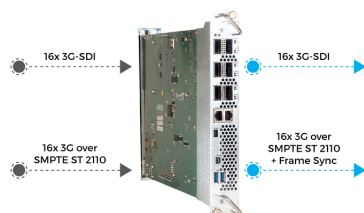
evMVP-12G-IPG12G



#### evMVP-12G-IPG12G

The IP Media Gateway (IPG) APP supports high-density 16x16 12G-SDI to/from SMPTE ST 2110 encapsulation and de-encapsulation with the addition of, monitoring quality, 1080p SMPTE ST 2110 downscaled copies of all 12G-SDI inputs. This allows you to maintain full UHD operation while also allowing you to keep multiview density to a minimum.

evIPG-3G-16FS



#### evIPG-3G-16FS

The IP Media Gateway (IPG) APP supports 16x 3G-SDI to SMPTE ST 2110 encapsulation with Frame Sync and 16x de-encapsulation.



# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### Specifications

#### SDI Inputs:

Connectors: 32x mini-DIN 1.0/2.3 or HD-BNC

#### SDI Outputs:

Connectors: 32x mini-DIN 1.0/2.3 or HD-BNC

#### Ethernet Interfaces:

Connectors: 6x QSFP, 2x RJ-45

#### Genlock Input:

Type: NTSC/PAL color black  
Level: 1V p-p nominal  
Connector: ev6-FR genlock input BNC

#### Electrical:

Power: 220W (nominal)  
Voltage: +12V DC  
EMI/EFI: Complies with FCC part 15, Class A EU EMC Directive

#### Physical:

Form Factor: 6RU in ev6-FR, also fits in ev1-FR (1RU) and in ev3-FR (3RU)  
Number of Slots: 2

#### Compliance:

Supported Media Standards:  
AMWA NMOS IS-04 v1.3,  
IS-05 v1.1 and  
BCP-002-01 v1.0

### Ordering Information

#### ev670-X30-HW-V2

Next Generation High Density Media Processing FPGA Accelerated Hardware

#### Ordering Options:

##### ev670-32x32-DIN-RP

Rear plate for ev670-x30-HW. Must with IPG apps and evVIP-SDI app.

Optional for ST-2110 multiviewer where SDI outputs are preferred.

##### ev670-32x32-HDBNC-RP

Rear plate for ev670-x30-HW. Must with IPG apps. And evVIP-SDI app.

Optional for ST-2110 multiviewer where SDI outputs are preferred.

#### Available QSFPs:

**QSFP25G-SM-PSM4-LR-G-NFEC** 100G QSFP, 4 channel 1310nm, MPO/APC connector, 10km

**QSFP25G-MM-M** 100G QSFP, 4 channel 850nm Multimode

### Application Options

#### evVIP-APP-100G-ST2110

Based software license to enable ST2110 inputs monitoring. Inputs, outputs and monitoring options sold separately.

#### Input Options:

##### evVIP-FK-8IP-3G

License key to enable 8 SD, HD, 3G or 2 UHD inputs on evVIP-100G

##### evVIP-FK-16IP-3G

License key to enable 16 SD,HD, 3G or 4 UHD inputs on evVIP-100G

##### evVIP-FK-24IP-3G

License key to enable 24 SD,HD, 3G or 6 UHD inputs on evVIP-100G

##### evVIP-FK-32IP-3G

License key to enable 32 SD,HD, 3G or 8 UHD inputs on evVIP-100G

##### evVIP-FK-40IP-3G

License key to enable 40 SD,HD, 3G or 10 UHD inputs on evVIP-100G

##### evVIP-FK-48-IP-3G

License key to enable 48 SD,HD, 3G or 12 UHD inputs on evVIP-100G

##### evVIP-FK-56-IP-3G

License key to enable 56 SD,HD, 3G or 14 UHD inputs on evVIP-100G

##### evVIP-FK-64-IP-3G

License key to enable 64 SD,HD, 3G or 16 UHD inputs on evVIP-100G

#### Output Options:

##### evVIP-FK-1OUT

License key to enable single output which support resolution up to 3480x2160

##### evVIP-FK-2OUT

License key to enable Two outputs which support resolution up to 3480x2160

##### evVIP-FK-3OUT

License key to enable Three 1080p outputs or 1 UHD and 1 1080P

##### evVIP-FK-4OUT

License key to enable Four outputs at 1080P or Two UHD output

##### evVIP-FK-5OUT

License key to enable Five outputs at 1080P. If using UHD outputs two UHD outputs is max per card.

##### evVIP-FK-6OUT

License key to enable Six outputs at 1080P. If using UHD outputs two UHD outputs is max per card.

##### evVIP-FK-7OUT

License key to enable seven outputs at 1080P. If using UHD outputs two UHD output is max per card.

##### evVIP-FK-8OUT

License key to enable eight outputs at 1080P. If using UHD outputs two UHD output is max per card.

(Maximum of 2x UHD outputs are supported; requires evVIP-FK-4OUT license key to enable 2x UHD outputs.)

# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### Application Options (continued)

#### Basic Monitoring Options:

<b>evMV-FK-VIP-8MON</b>	License key to enable basic video and audio monitoring for 8 inputs
<b>evMV-FK-VIP-16MON</b>	License key to enable basic video and audio monitoring for 16 inputs
<b>evMV-FK-VIP-24MON</b>	License key to enable basic video and audio monitoring for 24 inputs
<b>evMV-FK-VIP-32MON</b>	License key to enable basic video and audio monitoring for 32 inputs
<b>evMV-FK-VIP-40MON</b>	License key to enable basic video and audio monitoring for 40 inputs
<b>evMV-FK-VIP-48MON</b>	License key to enable basic video and audio monitoring for 48 inputs
<b>evMV-FK-VIP-56MON</b>	License key to enable basic video and audio monitoring for 56 inputs
<b>evMV-FK-VIP-64MON</b>	License key to enable basic video and audio monitoring for 64 inputs

#### Advanced Monitoring Options:

<b>evMV-FK-VIP-8MON-ADV</b>	Feature Key to enable 8 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 8 inputs license.
<b>evMV-FK-VIP-16MON-ADV</b>	Feature Key to enable 16 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 16 inputs license.
<b>evMV-FK-VIP-24MON-ADV</b>	Feature Key to enable 24 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 24 inputs license.
<b>evMV-FK-VIP-32MON-ADV</b>	Feature Key to enable 32 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 32 inputs license.
<b>evMV-FK-VIP-40MON-ADV</b>	Feature Key to enable 40 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 40 inputs license
<b>evMV-FK-VIP-48MON-ADV</b>	Feature Key to enable 48 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 48 inputs license
<b>evMV-FK-VIP-56MON-ADV</b>	Feature Key to enable 56 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 56 inputs license
<b>evMV-FK-VIP-64MON-ADV</b>	Feature Key to enable 64 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 64 inputs license

*(If advanced monitoring is required, a maximum of 32x 3G inputs per card are supported)*

#### evVIP-APP-100G-ST2022-6

Based software license to enable ST2022-6 inputs and outputs. Inputs, outputs and monitoring options sold separately.

#### Input Options:

<b>evVIP-FK-8IP-3G</b>	License key to enable 8 SD, HD, 3G or 2 UHD inputs on evVIP-100G
<b>evVIP-FK-16IP-3G</b>	License key to enable 16 SD,HD, 3G or 4 UHD inputs on evVIP-100G

# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### Application Options (continued)

<b>evVIP-FK-24IP-3G</b>	License key to enable 24 SD,HD, 3G or 6 UHD inputs on evVIP-100G
<b>evVIP-FK-32IP-3G</b>	License key to enable 32 SD,HD, 3G or 8 UHD inputs on evVIP-100G
<b>evVIP-FK-40IP-3G</b>	License key to enable 40 SD,HD, 3G or 10 UHD inputs on evVIP-100G
<b>evVIP-FK-48-IP-3G</b>	License key to enable 48 SD,HD, 3G or 12 UHD inputs on evVIP-100G
<b>evVIP-FK-56-IP-3G</b>	License key to enable 56 SD,HD, 3G or 14 UHD inputs on evVIP-100G
<b>evVIP-FK-64-IP-3G</b>	License key to enable 64 SD,HD, 3G or 16 UHD inputs on evVIP-100G

#### Output Options:

<b>evVIP-FK-1OUT</b>	License key to enable single output which support resolution up to 3480x2160
<b>evVIP-FK-2OUT</b>	License key to enable Two outputs which support resolution up to 3480x2160
<b>evVIP-FK-3OUT</b>	License key to enable Three 1080p outputs or 1 UHD and 1 1080P
<b>evVIP-FK-4OUT</b>	License key to enable Four outputs at 1080P or Two UHD output
<b>evVIP-FK-5OUT</b>	License key to enable Five outputs at 1080P. If using UHD outputs two UHD outputs is max per card.
<b>evVIP-FK-6OUT</b>	License key to enable Six outputs at 1080P. If using UHD outputs two UHD outputs is max per card.
<b>evVIP-FK-7OUT</b>	License key to enable seven outputs at 1080P. If using UHD outputs two UHD output is max per card.
<b>evVIP-FK-8OUT</b>	License key to enable eight outputs at 1080P. If using UHD outputs two UHD output is max per card.

#### Basic Monitoring Options:

<b>evMV-FK-VIP-8MON</b>	License key to enable basic video and audio monitoring for 8 inputs
<b>evMV-FK-VIP-16MON</b>	License key to enable basic video and audio monitoring for 16 inputs
<b>evMV-FK-VIP-24MON</b>	License key to enable basic video and audio monitoring for 24 inputs
<b>evMV-FK-VIP-32MON</b>	License key to enable basic video and audio monitoring for 32 inputs
<b>evMV-FK-VIP-40MON</b>	License key to enable basic video and audio monitoring for 40 inputs
<b>evMV-FK-VIP-48MON</b>	License key to enable basic video and audio monitoring for 48 inputs
<b>evMV-FK-VIP-56MON</b>	License key to enable basic video and audio monitoring for 56 inputs
<b>evMV-FK-VIP-64MON</b>	License key to enable basic video and audio monitoring for 64 inputs

#### Advanced Monitoring Options:

<b>evMV-FK-VIP-8MON-ADV</b>	Feature Key to enable 8 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 8 inputs license.
<b>evMV-FK-VIP-16MON-ADV</b>	Feature Key to enable 16 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 16 inputs license.
<b>evMV-FK-VIP-24MON-ADV</b>	Feature Key to enable 24 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 24 inputs license.

# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### Application Options (continued)

<b>evMV-FK-VIP-32MON-ADV</b>	Feature Key to enable 32 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 32 inputs license.
<b>evMV-FK-VIP-40MON-ADV</b>	Feature Key to enable 40 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 40 inputs license
<b>evMV-FK-VIP-48MON-ADV</b>	Feature Key to enable 48 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 48 inputs license
<b>evMV-FK-VIP-56MON-ADV</b>	Feature Key to enable 56 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 56 inputs license
<b>evMV-FK-VIP-64MON-ADV</b>	Feature Key to enable 64 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 64 inputs license

### evVIP-APP-SDI

Base software license to enable SDI multiviewer. Inputs, outputs and monitoring licenses sold separately.

#### Input Options:

<b>evVIP-SDI-FK-8IP-HD</b>	License key to enable 8 SD or HD inputs on evVIP-SDI
<b>evVIP-SDI-FK-16IP-HD</b>	License key to enable 16 SD or HD inputs on evVIP-SDI
<b>evVIP-SDI-FK-24IP-HD</b>	License key to enable 24 SD or HD inputs on evVIP-SDI
<b>evVIP-SDI-FK-32IP-HD</b>	License key to enable 32 SD or HD inputs on evVIP-SDI
<b>evVIP-SDI-FK-8IP-3G</b>	License key to enable 8 SD,HD or 3G inputs on evVIP-SDI
<b>evVIP-SDI-FK-16IP-3G</b>	License key to enable 16 SD,HD or 3G inputs on evVIP-SDI
<b>evVIP-SDI-FK-24IP-3G</b>	License key to enable 24 SD,HD or 3G inputs on evVIP-SDI
<b>evVIP-SDI-FK-32IP-3G</b>	License key to enable 32 SD,HD or 3G inputs on evVIP-SDI
<b>evVIP-SDI-FK-8IP-12G</b>	License key to enable 8 SD, HD, 3G or 12G inputs on evVIP-SDI
<b>evVIP-SDI-FK-16IP-12G</b>	License key to enable 16 SD,HD,3G or 12G inputs on evVIP-SDI
<b>evVIP-SDI-FK-24IP-12G</b>	License key to enable 24 SD,HD,3G or 12G inputs on evVIP-SDI
<b>evVIP-SDI-FK-32IP-12G</b>	License key to enable 32 SD,HD, 3G or 12G inputs on evVIP-SDI

#### Output Options:

<b>evVIP-FK-1OUT</b>	License key to enable single output which support resolution up to 3480x2160
<b>evVIP-FK-2OUT</b>	License key to enable Two outputs which support resolution up to 3480x2160
<b>evVIP-FK-3OUT</b>	License key to enable Three 1080p outputs or 1 UHD and 1 1080P
<b>evVIP-FK-4OUT</b>	License key to enable Four outputs at 1080P or Two UHD output
<b>evVIP-FK-5OUT</b>	License key to enable Five outputs at 1080P. If using UHD outputs two UHD outputs is max per card.
<b>evVIP-FK-6OUT</b>	License key to enable Six outputs at 1080P. If using UHD outputs two UHD outputs is max per card.

# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### Application Options (continued)

<b>evVIP-FK-7OUT</b>	License key to enable seven outputs at 1080P. If using UHD outputs two UHD output is max per card.
<b>evVIP-FK-8OUT</b>	License key to enable eight outputs at 1080P. If using UHD outputs two UHD output is max per card.

#### Basic Monitoring Options:

<b>evMV-FK-VIP-8MON</b>	License key to enable basic video and audio monitoring for 8 inputs
<b>evMV-FK-VIP-16MON</b>	License key to enable basic video and audio monitoring for 16 inputs
<b>evMV-FK-VIP-24MON</b>	License key to enable basic video and audio monitoring for 24 inputs
<b>evMV-FK-VIP-32MON</b>	License key to enable basic video and audio monitoring for 32 inputs

#### Advanced Monitoring Options:

<b>evMV-FK-VIP-8MON-ADV</b>	Feature Key to enable 8 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 8 inputs license.
<b>evMV-FK-VIP-16MON-ADV</b>	Feature Key to enable 16 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 16 inputs license.
<b>evMV-FK-VIP-24MON-ADV</b>	Feature Key to enable 24 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 24 inputs license.
<b>evMV-FK-VIP-32MON-ADV</b>	Feature Key to enable 32 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 32 inputs license.

### evVIP-APP-JPEG-XS-SDI

Base software for JPEG-XS-SDI standalone multiviewer.

#### Input Options:

<b>evVIP-FK-JPEG-XS-8IP</b>	License key to enable 8 JPEG-XS inputs on evVIP-APP-JPEG-XS-SDI
<b>evVIP-FK-JPEG-XS-16IP</b>	License key to enable 16 JPEG-XS inputs on evVIP-APP-JPEG-XS-SDI

#### Output Options:

<b>evVIP-FK-1OUT</b>	License key to enable single output which support resolution up to 3480x2160
<b>evVIP-FK-2OUT</b>	License key to enable Two outputs which support resolution up to 3480x2160
<b>evVIP-FK-3OUT</b>	License key to enable Three 1080p outputs or 1 UHD and 1 1080P
<b>evVIP-FK-4OUT</b>	License key to enable Four outputs at 1080P or Two UHD output

*(Maximum of 2x UHD outputs are supported; requires evVIP-FK-4OUT license key to enable 2x UHD outputs.)*

#### Basic Monitoring Options:

<b>evMV-FK-VIP-8MON</b>	License key to enable basic video and audio monitoring for 8 inputs
<b>evMV-FK-VIP-16MON</b>	License key to enable basic video and audio monitoring for 16 inputs



# ev670-X30-HW-V2

## Virtualized Media Processing Platform



### Application Options (continued)

#### Advanced Monitoring Options:

**evMV-FK-VIP-8MON-ADV** Feature Key to enable 8 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 8 inputs license.

**evMV-FK-VIP-16MON-ADV** Feature Key to enable 16 inputs advance audio, video, ancillary data monitoring on ev670-x30-HW and ev670-x30-HW-V2 for evVIP-APP-100G-ST2110 and evVIP-APP-100G-ST2022-6 app with 16 inputs license.

#### evIPG-12G

IPG app support 16x 12G encap and decap.

#### evIPG-3G

IPG app support 32x 3G encap and decap.

#### 670IPG-X30-APP-8-FS-HDR

ev670-X30-HW APP supporting frame synchronization of 8 asynchronous 12G-SDI inputs, 8 BBC LUT (HGL) color space conversions, SDR – HDR, and 8x0 2110 encapsulation (4k single essence). FS-evEDGE and HDR evEDGE licenses sold separately.

#### evMVP-12G-IPG12G

evMVP input app support 16 x 12G inputs. Also supports 16 x 12G decap.

#### evIPG-3G-16FS

IPG app support 16x Encap with Frame Sync and 16x Decap.