

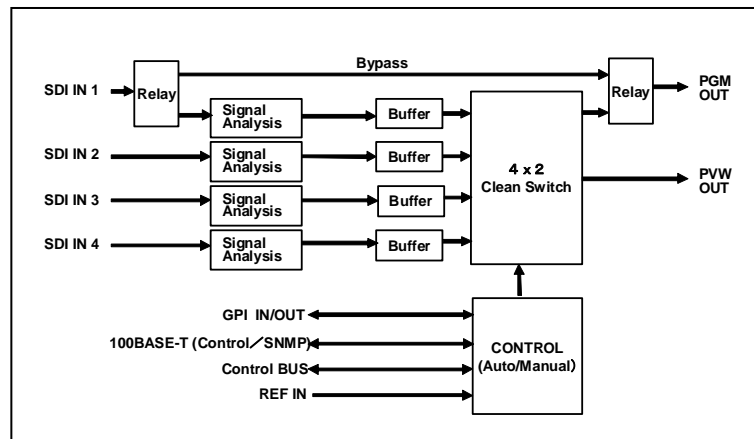
# VSP-X1000 Series

## 3G-SDI Video/Audio Signal Processing Boards

VSP-X1000 series are the next-generation application boards for digital TV in NEC integrated signal processing platform. One of the family members of VSP-X1000, 'ACO4' supports 4 SDI automatic changeover. 'XC' enables cross converting of 3G/HD/SD-SDI. 'EAP' carries 16ch audio processing function. VSP-X1000 series cover wide-range functions and flexibly meet customers' manifold requirements.



MF730/opt  
common frame for optical / converter board



Example of functional block diagram of non-interruptive automatic changeover board

## Features

### 3G-SDI interface

- Cutting-edge devices are used for supporting 3G-SDI and 16ch embedded audio.

### Highly flexible video input/output terminals

- 4 SDI inputs and 2 independent outputs are provided compliant with 3G-SDI. For example, the outputs 1 and 2 can be assigned for different formats such as HD and SD or used as PGM and PVW channels.

### A wide range of control interface

- By selecting the board on the rear connector side as necessary, various control interface types such as Ethernet, RS-485 and contact control are available.

### Alarm monitoring function

- Alarm monitoring by SNMP is available with CPU board. Only one CPU board is required with each frame.
- Alarm monitoring by GPI is available with each board without CPU board.

### Emergency bypass function

- In case of power shutdown, or manual operation, signals can through relay-bypass between SD1 Input 1 and Output 1.

### Compact and Space-efficient

- The VSP-X1000 is designed to be mounted in MF-730/712 integrated signal processing platform.

## VSP-X1000 Series lineup

### 3G-Compliant Cross Converter board [ VSP-X1000 XC ]

- Cross convert incorporating frame synchronizer. The board can interconvert video signal formats, and can provide output signals in different formats for the two SDI outputs.
- Embedded audio supports up to 16 channels , with single level and delay adjustment possibilities.
- Separated digital audio output signal is available.

### Embedded Audio Processor board [ VSP-X1000 EAP ]

- Inputting and recognizing two SDI signals. Provides output for 16 channels out of total 32 available embedded audio channels.
- Audio signal levels and delay adjustments of all the channels can be independently carried out.
- 5.1ch surround signals can be down-mixed to 2 channel stereo.

### Automatic Changeover board [ VSP-X1000 ACO4 ]

- An automatic changeover board with seamless switching function, equipped with monitoring capabilities of video, audio and Ancillary Packets of max. 4 lines of HD/SD input signals.
- Automatic switching is available with pre-defined switching conditions or manual switching via GPI/Ethernet.
- The board has Program OUT for the main line and Pre-View OUT for monitoring.

## MF730 / MF712 Optical converter common frame


	MF730 common frame (3RU)	MF712 common frame (1RU)
Number of boards to mount	Max. 14 boards *1	Max. 3 boards *1
Operating temperature	0°C to 40°C	0°C to 40°C
Configuration	① Frame x 1 ② Power supply board x 1 *2	① Frame x 1 ② Power supply board x 1 *2
Measurements	132(H) x 480(W) x 500(D) mm	132(H) x 44(W) x 500(D) mm
Power supply	① Power supply voltage: 85 to 264VAC (single phase) ② Frequency : 47 to 63Hz ③ Power consumption : 350VA (at max. load) *3	① Power supply voltage: 85 to 264VAC (single phase) ② Frequency : 47 to 63Hz ③ Power consumption : 120VA (at max. load) *3

\*1 This indicates the maximum number of boards which can be installed to MF700/XF700 Series frame with 1 slot size card.

\*2 Redundant Power Supply system is available with two power supply units.

\*3 The power consumption value indicated is measured under maximum load. Actual power consumption varies depending on the type(s) and quantity of boards mounted in the frame.



 <b>Safety precautions</b>	To install, make connections and operate this product, please carefully read and observe instructions, precautions and recommendations in our instruction manuals.
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- The colours in this brochure may differ from those of the actual unit. Designs and specifications of this product is subject to change without prior notice.

### For additional information:

Please contact your nearest NEC sales offices or visit [www.nec.com](http://www.nec.com).

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