



## 12G-SDI Terminal Board TY-SB01QS

### Product specification (design and specification subject to change without notice)

#### ■ SLOT Compatibility

Intel® SDM slot specification

#### ■ Terminal

SDI 1 IN	BNC x 1 : 0.8Vp-p (75Ω)
SDI 2 IN	BNC x 1 : 0.8Vp-p (75Ω)
SDI 3 IN	BNC x 1 : 0.8Vp-p (75Ω)
SDI 4 IN	BNC x 1 : 0.8Vp-p (75Ω)
SDI OUT	BNC x 1 : Active through

#### ■ Standards compliance

Video	12G-SDI: SMPTE ST 2082-1 / 2082-10 (SDI 1 IN Only) 3G-SDI: SMPTE ST 424 / 425 HD-SDI: SMPTE ST 292 Quad Link 3G-SDI : SMPTE ST 424 / 425-5 Quad Link HD-SDI
Audio	12G-SDI: SMPTE ST 299 (SDI 1 IN Only) 3G-SDI: SMPTE ST 299 (SDI 1 IN Only) HD-SDI: SMPTE ST 299 (SDI 1 IN Only)

#### ■ Compatible video format \*refer to the correspondence table

12G-SDI	3840/60p,50p,30p,25p,24p 4096/60p,50p,30p,25p,24p
3G-SDI	1080/60p, 50p, 30p, 25p, 24p, 60i, 50i 2048/60p,50p,30p,25p,24p
HD-SDI	1080/30p, 25p, 24p, 60i, 50i

#### ■ Compatible audio format

12G-SDI	48KHz, 20/24bit, 16CH, Synchronized video
3G-SDI	48KHz, 20/24bit, 16CH, Synchronized video
HD-SDI	48KHz, 20/24bit, 8CH, Synchronized video

#### ■ Mechanical

Dimensions (W x H x D)	W 7.68" x H 0.99" x D 4.90" (195 x 25 x 125 mm)
Weight	0.7 lbs. (300 g)
Carton siz (W x H x D)	W 12.6" x H 2.3" x D 12.5" (319 x 56 x 316 mm)
Gross weight	1.8 lbs. (790 g)
Accessories	Instruction manual

#### ■ Recommended cable

12G mode	75Ω coaxial cable L-5.5CUHD
3G, HD mode	75Ω coaxial cable 5C-FB

#### ■ Max. Transmission distance

12G mode	INPUT 100 m, OUTPUT 50 m
3G, HD mode	INPUT 100 m, OUTPUT 100 m

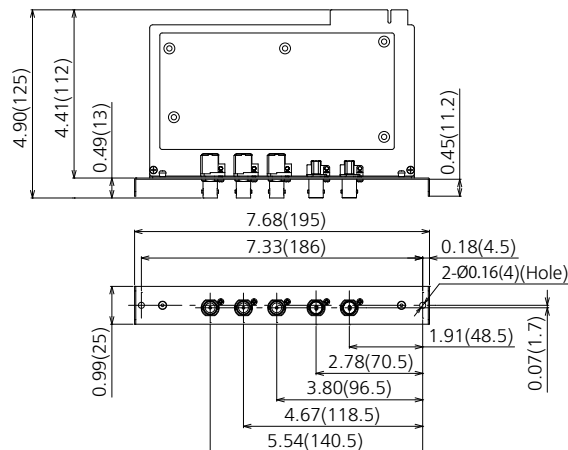
● This product is a 12G-SDI terminal board that can be used by attaching it to our display.

\* This product does not work by itself.

\* This product will not work if it is installed on a product other than the corresponding model.

\* Please consult with a professional engineer or dealer to install or remove this product from the display.

### DIMENSIONS



Cautions: This drawing is not a scale  
Units : inches (mm)

**Applicable Input Signals**

■Supported SDI input signal format chart

Corresponding signal	Resolution (Dot)	Scanning frequency		Dot clock frequency (MHz)	SDI Format (1.5G HD-SDI/ 3G Level A/ 3G Level B/ 12G Type1)	Link (Single/ Quad)	Colour Space (YCbCr/RGB)	Sampling Structure (4:2:2/ 4:4:4)	Bit Depth (10bit/ 12bit)
		Horizontal (kHz)	Vertical (Hz)						
1080/50i	1920 x 1080i	28.13	50.00	74.25	1.5G HD-SDI	Single	YCbCr	4:2:2	10
					3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
1080/60i*1	1920 x 1080i	33.75	60.00	74.25	1.5G HD-SDI	Single	YCbCr	4:2:2	10
					3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
1080/24p*1	1920 x 1080	27.00	24.00	74.25	1.5G HD-SDI	Single	YCbCr	4:2:2	10
					3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
1080/25p	1920 x 1080	28.13	25.00	74.25	1.5G HD-SDI	Single	YCbCr	4:2:2	10
					3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
1080/30p*1	1920 x 1080	33.75	30.00	74.25	1.5G HD-SDI	Single	YCbCr	4:2:2	10
					3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
1080/50p	1920 x 1080	56.25	50.00	148.50	3G Level A	Single	YCbCr	4:2:2	10
					3G Level B	Single	YCbCr	4:2:2	10
					3G Level A	Single	YCbCr	4:2:2	10
1080/60p*1	1920 x 1080	67.50	60.00	148.50	3G Level A	Single	YCbCr	4:2:2	10
					3G Level B	Single	YCbCr	4:2:2	10
					3G Level A	Single	YCbCr	4:2:2	10
2K/24p*1	2048 x 1080	27.00	24.00	74.25	3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
					3G Level A	Single	RGB	4:4:4	10/12
2K/25p	2048 x 1080	28.13	25.00	74.25	3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
					3G Level A	Single	RGB	4:4:4	10/12
2K/30p*1	2048 x 1080	33.75	30.00	74.25	3G Level A	Single	RGB	4:4:4	10/12
					3G Level B	Single	RGB	4:4:4	10/12
					3G Level A	Single	RGB	4:4:4	10/12
2K/50p	2048 x 1080	56.25	50.00	148.50	3G Level A	Single	YCbCr	4:2:2	10
					3G Level B	Single	YCbCr	4:2:2	10
					3G Level A	Single	YCbCr	4:2:2	10
2K/60p*1	2048 x 1080	67.50	60.00	148.50	3G Level A	Single	YCbCr	4:2:2	10
					3G Level B	Single	YCbCr	4:2:2	10
					3G Level A	Single	YCbCr	4:2:2	10
3840 x 2160/24p*1	3840 x 2160	54.00	24.00	297.00	1.5G HD-SDI-SQ	Quad	YCbCr	4:2:2	10
					3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	12
					3G Level B-SQ/2SI	Quad	YCbCr	4:2:2	12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12
3840 x 2160/25p	3840 x 2160	56.25	25.00	297.00	1.5G HD-SDI-SQ	Quad	YCbCr	4:2:2	10
					3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	12
					3G Level B-SQ/2SI	Quad	YCbCr	4:2:2	12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12
3840 x 2160/30p*1	3840 x 2160	67.50	30.00	297.00	1.5G HD-SDI-SQ	Quad	YCbCr	4:2:2	10
					3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	12
					3G Level B-SQ/2SI	Quad	YCbCr	4:2:2	12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12
3840 x 2160/50p	3840 x 2160	112.50	50.00	594.00	3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	10
					3G Level B-SQ/2SI	Quad			10
					12G Type1-2SI	Single			10
3840 x 2160/60p*1	3840 x 2160	135.00	60.00	594.00	3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	10
					3G Level B-SQ/2SI	Quad			10
					12G Type1-2SI	Single			10
4096 x 2160/24p*1	4096 x 2160	54.00	24.00	297.00	1.5G HD-SDI-SQ	Quad	YCbCr	4:2:2	10
					3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	12
					3G Level B-SQ/2SI	Quad	YCbCr/RGB	4:4:4	10/12
					3G Level B-SQ/2SI	Quad	YCbCr	4:2:2	12
					12G Type1-2SI	Single	YCbCr/RGB	4:4:4	10/12

## ● Applicable Input Signals

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		Horizontal (kHz)	Vertical (Hz)						
4096 x 2160/25p	4096 x 2160	56.25	25.00	297.00	1.5G HD-SDI-SQ	Quad	YCbCr	4:2:2	10
					3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	12
							YCbCr/RGB	4:4:4	10/12
					3G Level B-SQ/2SI	Quad	YCbCr	4:2:2	12
							YCbCr/RGB	4:4:4	10/12
					12G Type1-2SI	Single	YCbCr	4:2:2	12
YCbCr/RGB	4:4:4	10/12							
4096 x 2160/30p*1	4096 x 2160	67.50	30.00	297.00	1.5G HD-SDI-SQ	Quad	YCbCr	4:2:2	10
					3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	12
							YCbCr/RGB	4:4:4	10/12
					3G Level B-SQ/2SI	Quad	YCbCr	4:2:2	12
							YCbCr/RGB	4:4:4	10/12
					12G Type1-2SI	Single	YCbCr	4:2:2	12
YCbCr/RGB	4:4:4	10/12							
4096 x 2160/50p	4096 x 2160	112.50	50.00	594.00	3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	10
					3G Level B-SQ/2SI	Quad			10
					12G Type1-2SI	Single			10
4096 x 2160/60p*1	4096 x 2160	135.00	60.00	594.00	3G Level A-SQ/2SI	Quad	YCbCr	4:2:2	10
					3G Level B-SQ/2SI	Quad			10
					12G Type1-2SI	Single			10

\*1: 1/1.001 is also supported.

### SDI Format

1.5G HD-SDI:	HD-SDI format with 1.5 GHz
3G Level A:	3G-SDI format with 3 GHz Level A
3G Level B:	3G-SDI format with 3 GHz Level B
12G Type1:	12G-SDI format with 12 GHz
SQ:	Square Division method
2SI:	2 Sample Interleave method

### Link

Single:	Input only for SDI 1 IN
Quad:	Input with a combination of SDI 1 IN, SDI 2 IN, SDI 3 IN, and SDI 4 IN

### Colour Space

YCbCr :	Y brightness signal, C <sub>B</sub> colour-difference signal, C <sub>R</sub> colour-difference signal
RGB :	Primary colour R/G/B signals

### Sampling Structure

4:2:2 :	The sampling rate for Y signal, C <sub>B</sub> and C <sub>R</sub> signals is 4:2:2.
4:4:4 :	The sampling rate for Y signal, C <sub>B</sub> and C <sub>R</sub> signals (or R/G/B signals) is 4:4:4.

### Note

- Closed Captioning (C.C) and Time Code (TC) are not supported for this product.
- An auto detected signal format may be differently displayed from the actual input signal.