

Specification for

Model : HSC

Revised : Apr. 20. 2012
Original Release Date : May. 25. 2011

OPHIT

Revision History

Version Number	Revision Date	Author	Description of Changes
1.0	May. 25. 2011	J.H.Lee	Initial Version
1.1	Dec. 13. 2011	J.H Lee	Support resolution modified
1.2	Mar. 15. 2012	J.H Lee	Support resolution added
1.3	Apr. 20. 2012	J.H Lee	Ordering Information Removed

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1. General Description

OPHIT 's HSC is perfect solution for converting HDMI signal to SDI signal.

It enables HDMI compliant device to be connected to digital display with SDI input.

It can also split one HDMI signal to two SDI signal at the same time.

- Converts HDMI signal to SDI signal
- Input : 1 x HDMI / Output : 2 x SDI
- Compliant with HDMI1.3
- Support two SDI output for cascade function
- Input signal detection monitoring function (LED)

2. General Specification

Input port	TMDS
HDMI Input Signal Resolution	480i @ 60Hz, 720p @ 50, 59.94/60Hz, 1080i @ 50, 59.94/60Hz, 1080p @ 23.98/24, 25, 29.97/30, 50 and 59.94/60Hz
Output port	SD/HD/3G-SDI
SDI Output Signal Resolution	480i @ 60Hz, 720p @ 50, 59.94/60Hz, 1080i @ 50, 59.94/60Hz, 1080p @ 23.98/24, 25, 29.97/30, 50 and 59.94/60Hz
Connector	
Input	HDMI
Output	BNC x 2
Power	DC-JACK 2.1 pie
General	
Dimensions	85x100x25mm (W x D x H)
Weight	250g
Enclosure Color	Navy
Power	DC +12V, 1.0A

3. Absolute Maximum Ratings

Parameter	Rating
Storage temperature	-20°C ~ +70°C
Operating temperature	0°C ~ +50°C
Power Supply	-0.3 ~ 12 V
Relative Humidity	10 ~ 80 %
Lead-free solder temperature	260°C, 10 seconds

NOTICE

Stresses greater than those listed under “Absolute Maximum Ratings” may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions above those indicated in the operations section for extended periods of time may affect reliability.

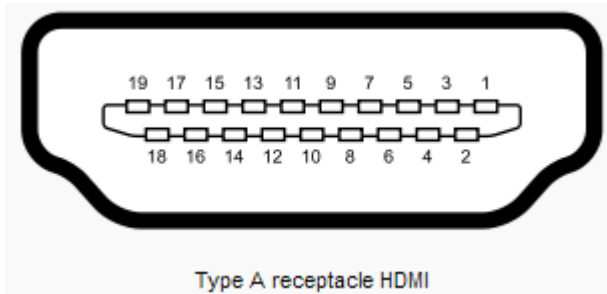
4. Electrical Specification

4.1 Electrical Specification

	Parameter	Symbol	Min	Typ	Max	Units	Condition
P O W E R	Supply Voltage	Vcc		+12.0		V	
	Supply Current	Icc		0.21		A	1080p/60Hz
	Power Dissipation	Po		2.52		W	1080p/60Hz
T M D S	Reference voltage for graphic signal	Vref	+3.1	+3.3	+3.5	V	
	Single-ended high level input voltage	VH	Vref-0.01		Vref+0.01	V	
	Single-ended low level input voltage	VL	Vref-0.6		Vref-0.4	V	
	Single-ended input swing voltage	Vswing	0.4		0.6	V	
	Single-ended standby input voltage		Vref-0.01		Vref+0.01	V	
	Data Output Load	RLD		50		Ohms	

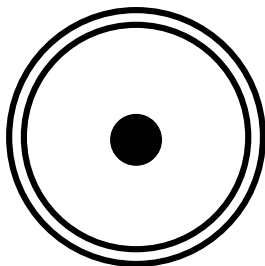
4.2 Connector Pin Assignment

4.2.1 Input port



Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data 2+	2	T.M.D.S. Data 2 Shield
3	T.M.D.S. Data 2-	4	T.M.D.S. Data 1+
5	T.M.D.S. Data 1 Shield	6	T.M.D.S. Data 1-
7	T.M.D.S. Data 0+	8	T.M.D.S. Data 0 Shield
9	T.M.D.S. Data 0-	10	T.M.D.S. Clock+
11	T.M.D.S. Clock Shield	12	T.M.D.S. Clock-
13	CEC	14	Reserved (N. C on device)
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		

4.2.2 Output port

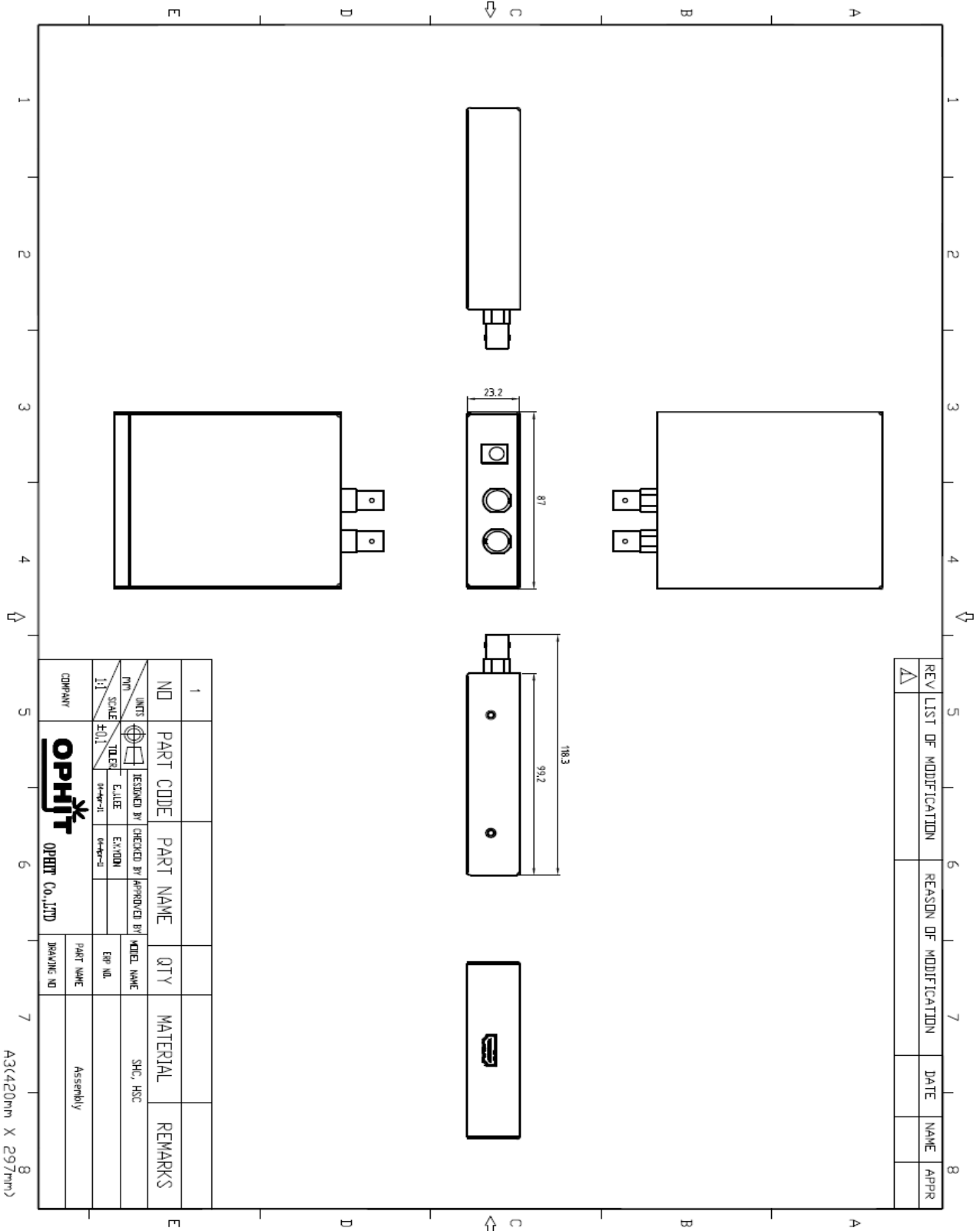


Female Connector
< BNC type >

Pin	Signal Assignment
1	SMPTE Signal Output

5. Mechanical Specification

5.1 Case Dimension



6. RoHS

Certificate of Conformance RoHS

Dear Customer,

On January 27, 2003, the European Parliament and the Administrative Council adopted Directive 2002/95/EC (RoHS) that concerns the "Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment".

The parts currently delivered by **OPHIT CO., LTD.** are already free of lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (Cr⁶⁺), polybrominated biphenyl (PBB) and polybrominated diphenyl (PBDE).

This Certification of Conformance is to certify that the products listed below comply with RoHS Directive mentioned above:

- HSC

If you have any further questions regarding the RoHS compliance of parts delivered by **OPHIT CO., LTD.**, please do not hesitate to contact us at support@ophit.com.

Best regards,

JONG-KOOK MOON/CEO

OPHIT CO., LTD.