



FTD-102/104
DISTRIBUTOR – 1X2, 1X4

Customer :

Specification for
Model : FTD-10x Series
(4K * 2k Distributor 1x2 , 1x4)

Revision Release Date : Apr. 28. 2014

OPHIT

Revision History

Version Number	Revision Date	Author	Description of Changes
1.0	Jen. 16. 2014	J.W LEE	Initial Version
1.1	Apr. 28. 2014	J.W LEE	Second Version.

Reference Documents and Standards

Reference	Description	Revision/Date
HDMI 1.4a	High-Definition Multimedia Interface	4 th March, 2010
HDCP 1.3	High-bandwidth Digital Content Protection	21 th Dec, 2006
EDID 1.3	Extended display identification data	19 TH Nov, 2011

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1. General Description

OPHIT's HDMI splitter, FTD-10x Series, let your one digital audio, video signal(Set-top box, DVD player and PC) with HDMI output distributes into two or four digital displays such as PC monitor, HDTV, Projector and 4KTV. Also, the splitter is able to support Real EDID. So, you are able to use resolution you want up to 4k * 2k 30Hz.

- Support full HD, full 3D and 4Kx2K video
- Compliant with the HDMI 1.4a
- HDCP decryption, HDCP encryption and transmits the data to 4 HDMI ports.

● LED Description

- Power LED : If users connect power, Power led(BLUE color) will be on.
- ACT LED : If users connect HDMI outputs, ACT LED will blink, and if user are able to watch output, ACT LED will maintain LED ON(Yellow).
- OUTPUT LED : if users connect HDMI OUTPUT, OUTPUT LED will be on.

2. General Specification

Input Format	HDMI
Input Signal	Max 4K x 2K@30Hz
Output Format	HDMI
Output Signal	Max 4K x 2K@30Hz
Connector	
Input	HDMI A TYPE
Output	HDMI A TYPE * 4
Power	DC-JACK 2.1 pie
General	
Dimensions	95.7 x 180 x 28mm (W x D x H)
Weight	250g
Enclosure Color	Black
Power	DC +12V, 1A

3. Absolute Maximum Ratings

Parameter	Rating
Storage temperature	-10°C ~ +70°C
Operating temperature	0°C ~ +70°C
Power Supply	12 V
Relative Humidity	10 ~ 60 %, Non-Condensing
Lead solder temperature	380°C +/-30°C, 10 seconds

NOTICE

Stresses greater than those listed under “Absolute Maximum Ratings” may cause permanent damage to the device. This is a stress rating 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.

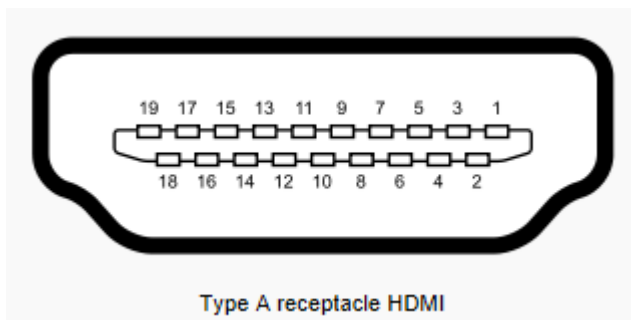
4. Electrical & Optical Specification

4.1 Electrical Specification

Parameter		Symbol	Min	Typ	Max	Units	Condition
P O W E R	Supply Voltage	Vcc		+12		V	
	Supply Current	Icc		65		mA	Standby
				350			Working
	Power Dissipation	Po		0.8		W	Standby
				4.2			Working

4.2 Connector Pin Assignment

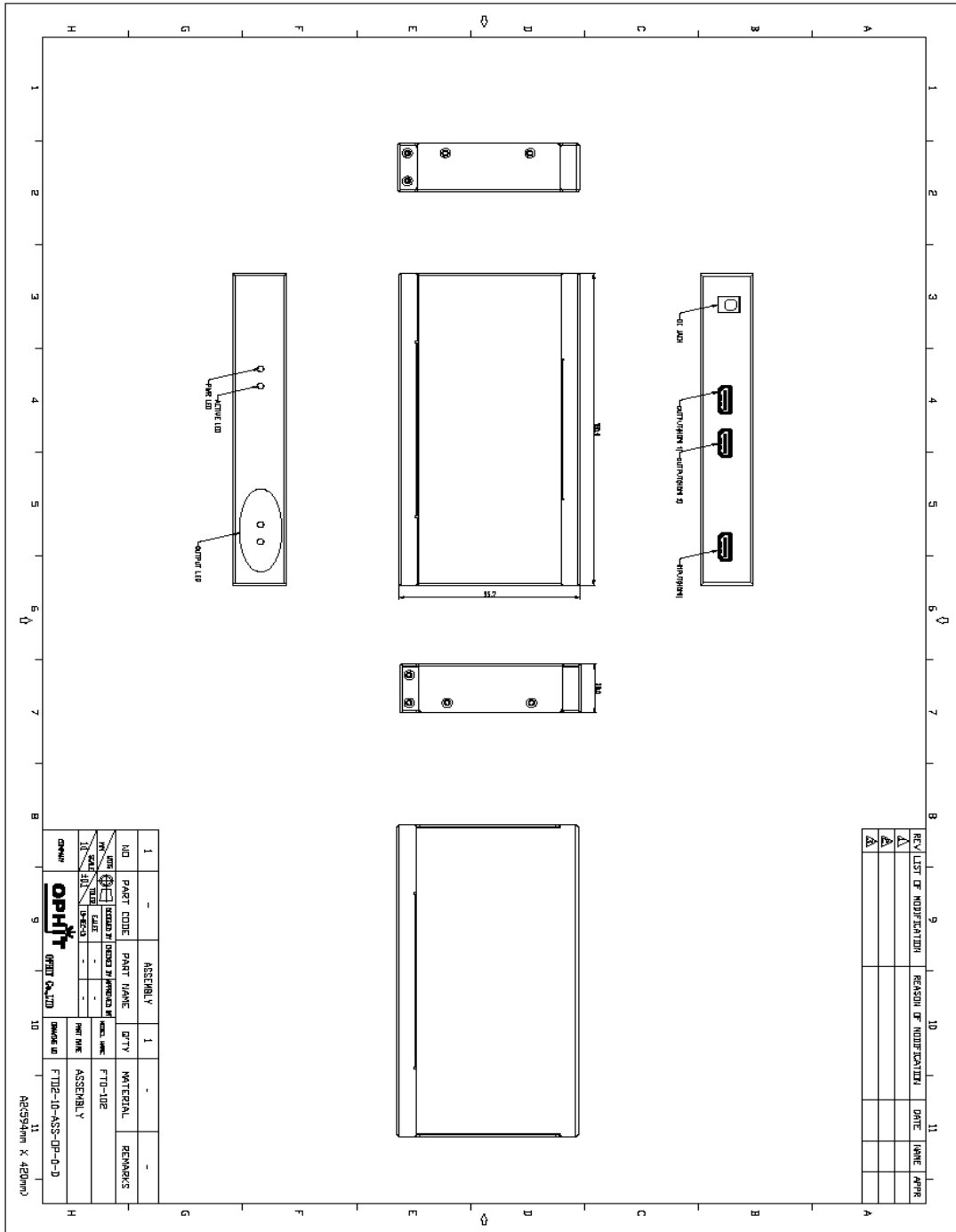
4.2.1 Input/Output Connector



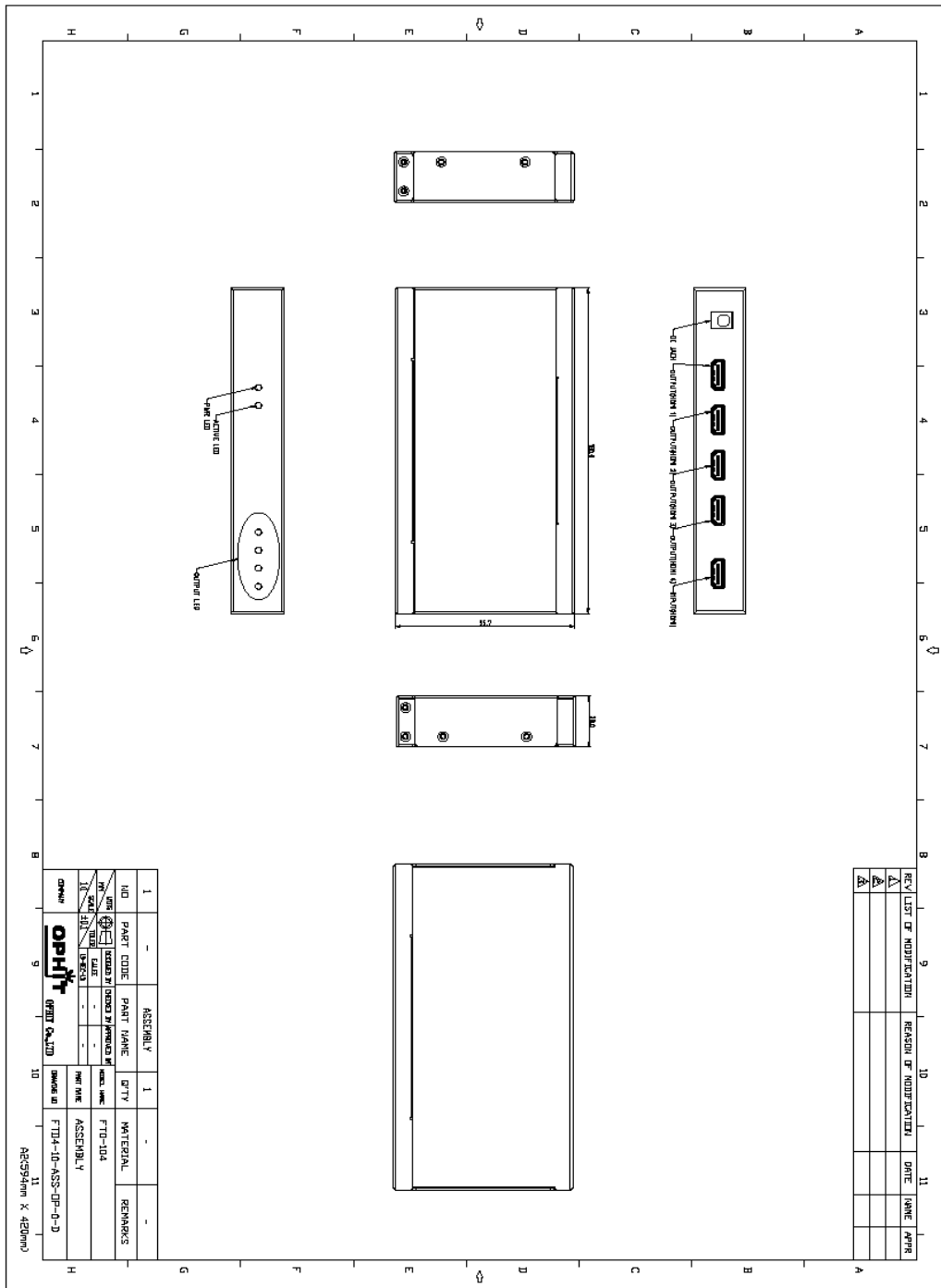
Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS DATA2+	9	TMDS DATA0-	17	DDC
2	TMDS DATA2 SHIELD	10	TMDS CLOKE+	18	+5V
3	TMDS DATA2-	11	TMDS CLOKE SHIELD	19	HPD
4	TMDS DATA1+	12	TMDS CLOKE-		
5	TMDS DATA1 SHIELD	13	CEC		
6	TMDS DATA1-	14	HEAC		
7	TMDS DATA0+	15	SCL		
8	TMDS DATA0 SHIELD	16	SDA		

5. Mechanical Specification

5.1 Case Dimension (FTD-102)



5.2 Case Dimension (FTD-104)



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 (Cr 6), polybrominated biphenyl (PBB) and poly brominated diphenyl (PBDE).

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

- FTD-102/104

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.