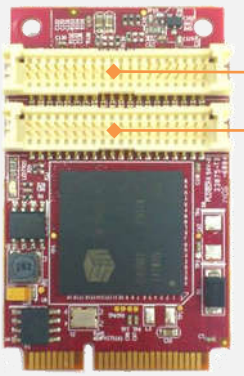
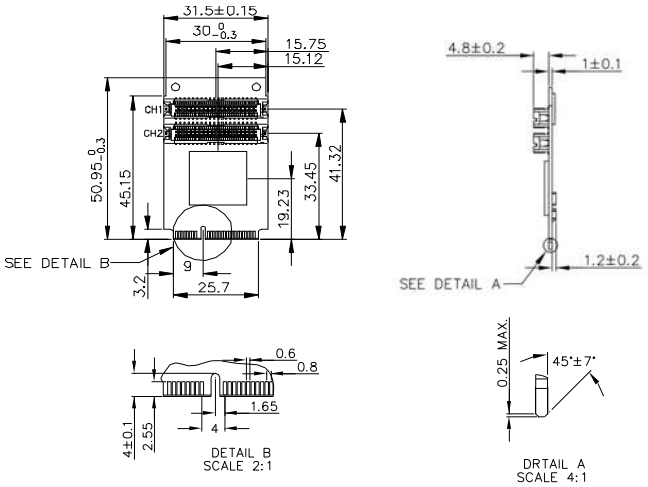
EMPV-1201
mPCIe to dual VGA & HDMI(or DVI) module



Features

- VGA Output up to 1920x1440. up to 75Hz vertical rate.
- HDMI up to 1080P, Ultra low power consumption.
- Allow for 90º, 180º, and 270º rotation of on-screen images.
- DVI-D Single Link up to 1080P.
- Optional Industrial Temperature (-10°C to +85°C) support.
- 30μ" golden finger, 3 years warranty.
- Industrial design. Manufactured in innodisk Taiwan.

Mechanical Drawing



HDMI or DVI-D Single Link (CN2)

Signal	Pin	Pin	Signal
+5V	2	1	+3.3V
+5V	4	3	+3.3V
	6	5	
GND	8	7	GND
TMDS_D0+	10	9	TMDS_D1+
TMDS_D0-	12	11	TMDS_D1-
GND	14	13	GND
TMDS_D2+	16	15	
TMDS_D2-	18	17	
GND	20	19	GND
	22	21	
	24	23	
GND	26	25	GND
	28	27	DDC_SCL
	30	29	DDC_SDA
GND	32	31	GND
TMDS_CK+	34	33	CEC
TMDS_CK-	36	35	HPD
GND	38	37	GND
	40	39	

Dual VGA(CN1)

Signal	Pin	Pin	Signal
+5V	2	1	3.3V
+5V	4	3	3.3V
	6	5	
GND	8	7	GND
R_1	10	9	B_1
G_1	12	11	
GND	14	13	GND
H_Sync_1	16	15	DDC_SCL_1
V_Sync_1	18	17	DDC_SDA_1
GND	20	19	GND
R_0	22	21	B_0
G_0	24	23	
GND	26	25	GND
H_Sync_0	28	27	DDC_SCL_0
V_Sync_0	30	29	DDC_SDA_0
GND	32	31	GND
	34	33	
	36	35	
GND	38	37	GND
	40	39	

Specifications

Form-Factor	mini PCIe
Input I/F	PCI Express 1.0
Output I/F	VGA x 2, HDMI x 1, DVI-D Single Link x 1 (Alternative)
Output Connector	40pin 1.25mm x 2(40DP-1.25)
TDP	1.98W(3.3V x 600mA)
Dimension (WxLxH)	ST: 50.95 x 31.5 x 7 mm, WT: 50.95 x 31.5 x 8.83 mm
Temperature	Operation: STD: 0˚C ~ +70˚C WT: -10˚C ~ +85˚C Storage: -55˚C ~ +95˚C
Environment	Vibration: 5G @7~2000Hz, Shock: 50G @ 0.5ms
Notes	OS Support : Windows XP (32 bit), Windows 7/8/8.1/10 (32/64 bit), Linux Ubuntu 12.04-16.04(32/64bit), Linux Fedora 17-21(32/64bit), Linux CentOS/Redhat 6.5 (32/64bit)-7.2(64bit) Different CN2 cable for HDMI or DVI-D(Alternative). Please download driver from Myinnodisk website.

Order information

EMPV-1201-C1-VGA (mPCIe to dual VGA module)
- EMPV-1201-C1 Module Card x 1
- VGA Cable (300mm) x 1

EMPV-1201-C1-HDMI (mPCIe to single HDMI module)
- EMPV-1201-C1 Module Card x 1
- HDMI Cable (300mm) x 1

EMPV-1201-C1-DVI (mPCIe to single DVI module)
- EMPV-1201-C1 Module Card x 1
- DVI Cable (250mm) x 1

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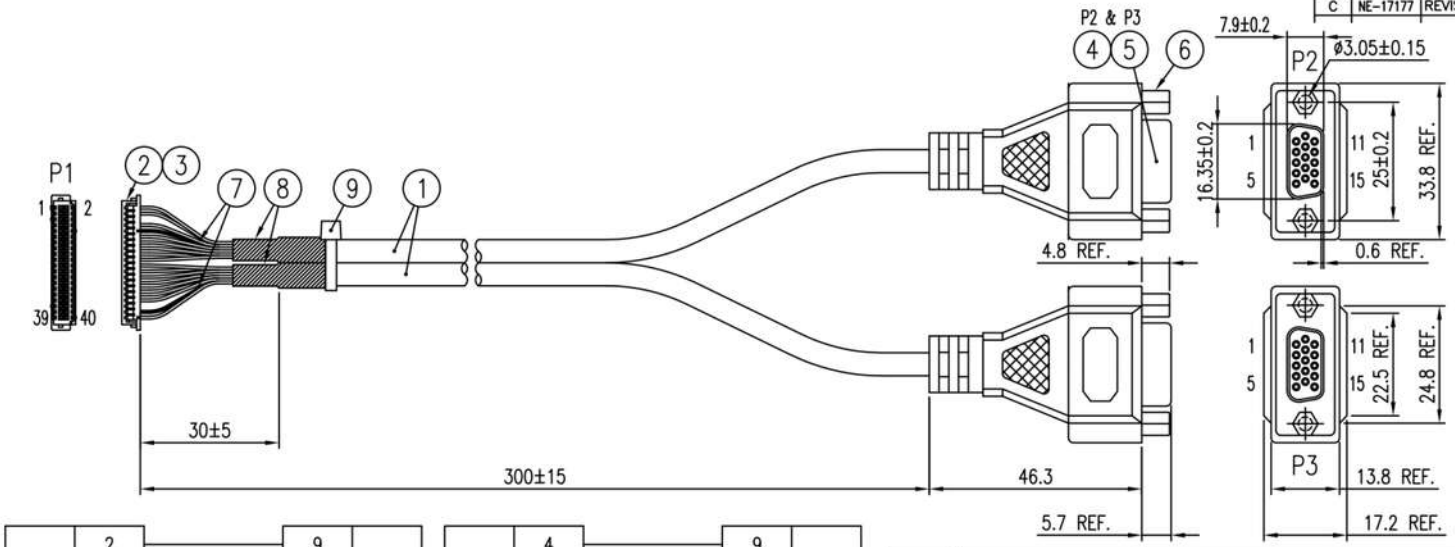
January 14, 2020

innodisk

VGA Cable Drawing

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REV.	R.S. No.	DESCRIPTION	DATE
UR1		UNAPPROVED REVISIONS	11/24-2014
UR2	NEX-15014	REVISED LENGTH (300±15 -> 250±15)	03/04-2015
C	NE-17177	REVISED LENGTH (250±15 -> 300±15)	12/15-2017



P1	P2
2	9
7	5
8	7
9	3
10	1
12	2
13	6
14	8
15	15
16	13
17	12
18	14
20	10
19	SHELL
DRAIN+BRAID	

P1	P3
4	9
21	3
22	1
24	2
25	8
26	5
27	15
28	13
29	12
30	14
31	10
32	6
38	7
37	SHELL
DRAIN+BRAID	

ITEM	PART NO./SUPPLIER	DESCRIPTION	Q'TY
9		CABLE TIE	1 PC
8		HEAT SHRINKABLE TUBE, ø6.0mm, L = 20.0mm, BLACK	2 PCS
7		HEAT SHRINKABLE TUBE, ø1.5mm, L = 30.0mm, BLACK	2 PCS
6		SCREW, #4-40UNC	4 PCS
5		MOLD, PVC, BLACK (INNER WITH COPPER FOIL)	A/R
4	HD-15SS-KS-N0/Gwo Jinn	HIGH DEMSITY D-SUB CONN., 15-POS., RECEPTACLE, 2.29mm PITCH, INSULATOR : BLACK	2 PCS
3	H13-P/E.C.I.	SOCKET CONTACT	26 PCS
2	H13H-2x20/E.C.I.	HOUSING, 40-POS., 1.25mm PITCH, BEIGE	1 PC
1	Spec./Xinya	CABLE, 28 AWG x 13C + ADB, UL 2725, BLACK	A/R

Electronics Test :
1. Hi-Pot Test : DC 300V/0.01S
2. Insulation Resistance : 2 MΩ (Min.)
3. Conductor Resistance : 3 Ω (Max.)
4. All cable open short and miss wire test : 100%

WIRING TABLE

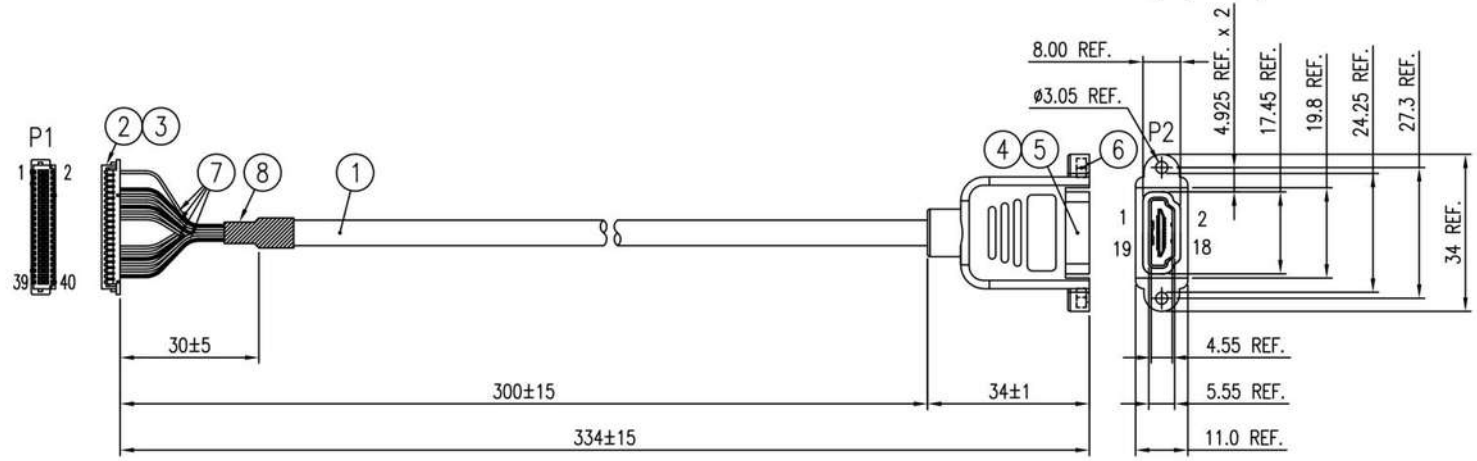
SPEEDCON

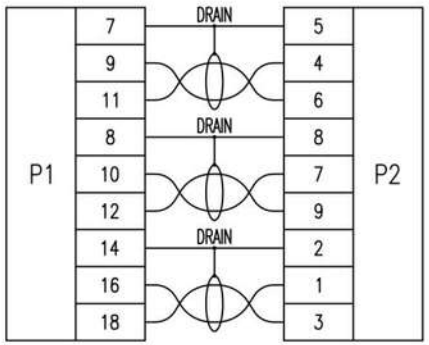
TITLE: P1.25 TO VGA CABLE			DRAWN: RUNES
PART NO: CBL-S0025-0029			CHKD: JEFF
	UNIT: mm[inch]	SHEET: 1 of 1	REV: C
			DATE: 2017.12.15

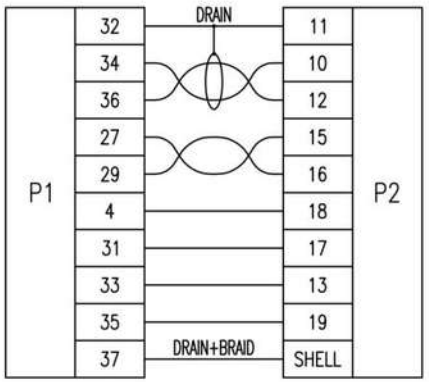
innodisk HDMI Cable Drawing

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REV.	R.S. No.	DESCRIPTION	DATE
UR1		UNAPPROVED REVISIONS	12/16-2013
UR2	NEX-14013	CHANGED HDMI CONNECTOR (PLUG -> RECEPTACLE) & LENGTH	01/23-2014
UR3	NEX-15012	REVISED LENGTH (300±15 -> 250±15)	02/24-2015
UR4	NEX-15058	ADDED P2 DIMENSION	09/04-2015
E	NE-17177	REVISED LENGTH (250±15 -> 300±15)	12/15-2017







WIRING TABLE

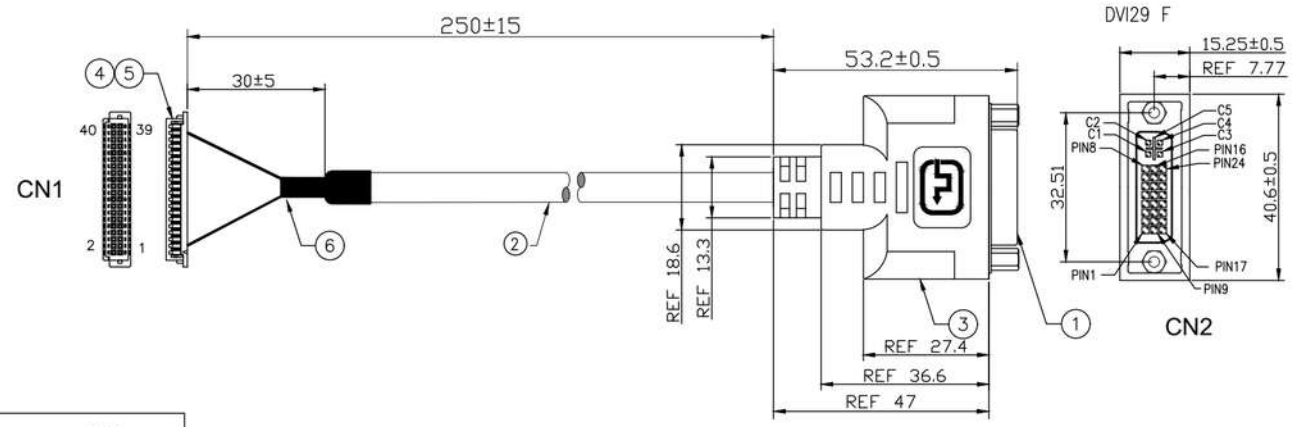
ITEM	PART NO./SUPPLIER	DESCRIPTION	Q'TY
8		HEAT SHRINKABLE TUBE, ø6.0mm, L = 15.0mm, BLACK	1 PC
7		HEAT SHRINKABLE TUBE, ø1.0mm, L = 30.0mm, BLACK	4 PCS
6	Drawing/SZ-QT	HEXAGON NUT, #4-40UNC	2 PCS
5		MOLD, PVC, BLACK (INNER WITH COPPER FOIL)	A/R
4	HMFXRXXXXR04/Conitone	HDMI CONNECTOR, 19-POS., RECEPTACLE (PIN & SHELL GOLD FLASH)	1 PC
3	H13-P/E.C.I.	SOCKET CONTACT	19 PCS
2	H13H-2x20/E.C.I.	HOUSING, 40-POS., 1.25mm PITCH, BEIGE	1 PC
1	206186015000/Xinya	CABLE, (30 AWG x 1P + AD) x 4C + 30 AWG x 1P + 30 AWG x 5C + ADB, UL 20276, BLACK	A/R

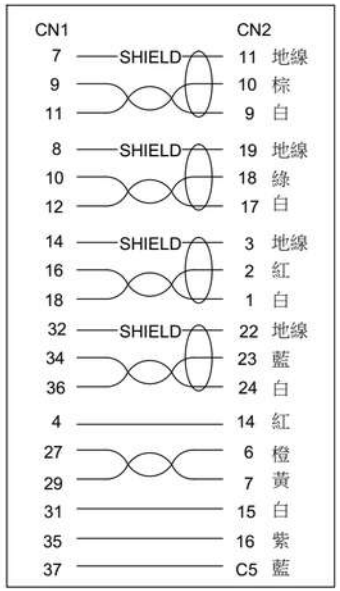
Electronics Test :
1. Hi-Pot Test : DC 300V/0.01S
2. Insulation Resistance : 2 MΩ (Min.)
3. Conductor Resistance : 3 Ω (Max.)
4. All cable open short and miss wire test : 100%

SPEEDCON

TITLE: P1.25 TO HDMI CABLE			DRAWN: RUNES
PART NO: CBL-S0025-0010			CHKD: JEFF
UNIT: mm(inch)	SHEET: 1 of 1	REV: E	DATE: 2017.12.15

DVI Cable Drawing





No.	DESCRIPTION	Q'TY	Supplier
6	BLACK HEAT SHRINK TUBE		
5	JCTC 11252H00-2*20P or TYU TU1257HN0-2*20P	1PCS	
4	JCTC 11252T0P-2E-NK or TYU TU1257TP0-A	18PCS	
3	BLACK HEAT SHRINK TUBE ALUMINUM FOIL MOLDED PE COLOR TRANSPARENT MOLDED PVC BLACK		
2	UL20276 [(30AWG*1Pair+AL+D+MY)*4Pcs+(30AWG*1Pair)+(30AWG*5C)]+AL+AMA BRAID(65%), OD 5.5mm, HDMI CABLE, JACKET BLACK		
1	DVI29 FEMALE AND HEX-NUT (4.75*10mm) GOLD FLASH ON CONTACTS,WHITE INSULATOR	1Set	

REMARK			TOLERENCE		REVISION	DATE	NOTE
1	UNIT	mm	401 ABOVE	±0.30	A	2017/12/19	
2	SCALE	1:1	121-400	±0.20			
3	SIZE	A3	31-120	±0.15			
4			7-30	±0.10			
			6 BELOW	±0.05			

PART NAME	EP (CABLE)		
DESCRIPTION	DVI CABLE CAH-DVI00005LG		
MATERIAL	SEE TABLE		DRAW NO. ZZ0106A
	BY	DATE	
DESIGNED	Ader Chang	2017/12/19	innodisk
APPROVED			SHEET 1 OF 1

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