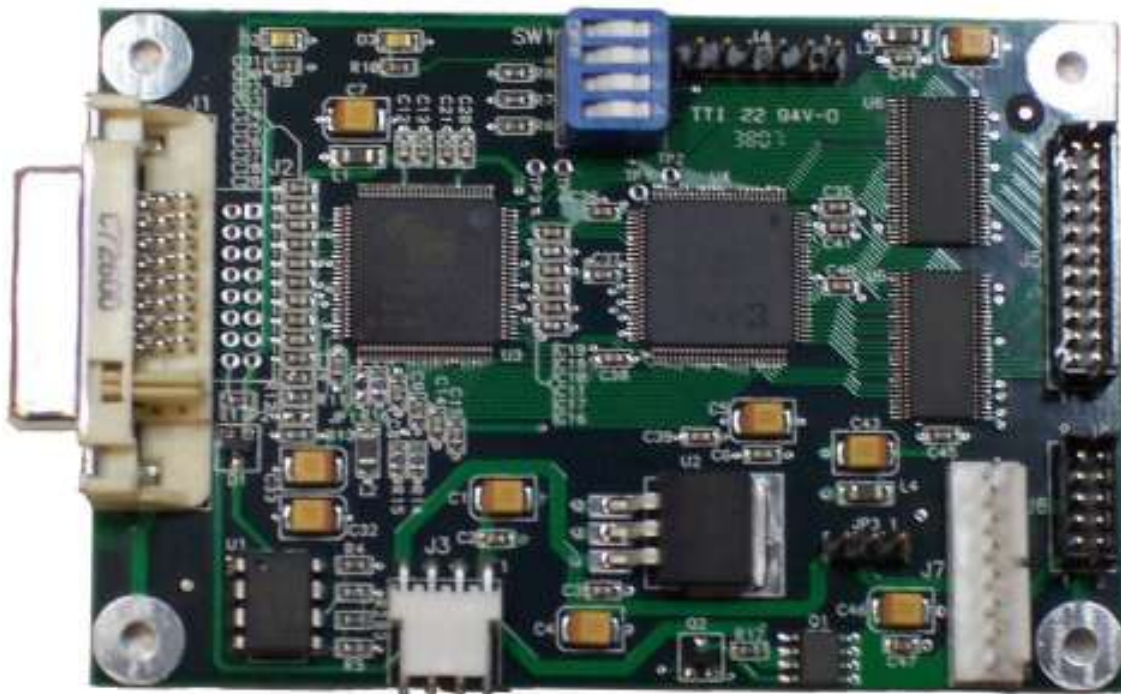


# ADP-103 DVI to LVDS Adapter Board

The ADP-103 Adapter Board from Systemation Technology, Inc. converts DVI video to LVDS video. The conversion is 1:1 with no scaling. This low cost easy-to-use adapter provides a convenient way to connect an LVDS type LCD to an existing DVI port.



## S P E C I F I C A T I O N S

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### **1 – Power**

The board can be powered from the 5V on the DVI connector or externally through the J3 connector.

The 12VDC to power a backlight inverter must be applied at J3

### **2 – Color Mapping**

The board supports 4 different LVDS color data mapping schemes. The switches SW1-3 and SW1-4 selects the color mapping.

### **3 – Single/Dual Channel LVDS LCD**

The ADP-103 board can support a 1 or 2 channel LCD.

SW1-2 = ON = Single Channel LVDS LCD

SW1-2 = OFF = Dual Channel LVDS LCD

### **4 – LCD Power**

The 3-pin jumper JP1 selects the power to be supplied to the LCD. A 2-position shunt connects 2 of the 3 pins on this jumper.

JP1 pins 1-2	Set LCD Power to 3.3V
JP1 pins 2-3	Set LCD Power to 5V

### **5 – Inverter Backlight Power**

SW1-1 selects the power option for the 12V power to the backlight inverter.

SW1-1 = OFF = Backlight Power always ON

SW1-1 = ON = Backlight on only when DVI video is present

<b>J1</b>	<b>Description</b>		<b>MFG</b>	<b>MFG P/N</b>
	<b>DVI-D Video Input Connector</b>		<b>Molex</b>	<b>74320-4004</b>
J1-1	RX2-			
J1-2	RX2+			
J1-3	GROUND			
J1-4	RX4-			
J1-5	RX4+			
J1-6	SCL			
J1-7	SDA			
J1-8	NO CONNECT			
J1-9	RX1-			
J1-10	RX1+			
J1-11	GROUND			
J1-12	RX3-			
J1-13	RX3+			
J1-14	5VDC			
J1-15	GROUND			
J1-16	HOT PLUG			
J1-17	RX0-			
J1-18	RX0+			
J1-19	GROUND			
J1-20	RX5-			
J1-21	RX5+			
J1-22	GROUND			
J1-23	RXC+			
J1-24	RXC-			

<b>J3</b>	<b>DC Power Input</b>		<b>Molex</b>	<b>22-05-3041</b>
J3-1	12VDC			
J3-2	Ground			
J3-3	Ground			
J3-4	5VDC			

<b>J7</b>	<b>Inverter Interface</b>		<b>Molex</b>	<b>22-23-2081</b>
J7-1	+12VDC Switched			
J7-2	+12VDC Switched			
J7-3	+5VDC Switched			
J7-4	+5VDC Switched	<b>Mating Hardware</b>	<b>MFG</b>	<b>MFG P/N</b>
J7-5	Not Used	Shell	Molex	22-01-3087
J7-6	Not Used	Crimp	Molex	08-52-0123
J7-7	GND			
J7-8	GND			

<b>J5</b>	<b>Description</b>		<b>MFG</b>	<b>MFG P/N</b>
	<b>LVDS Data Output</b>		<b>Hirose</b>	<b>DF11-22DP-2DSA</b>
J5-1	Ain3+			
J5-2	Ain3-			
J5-3	Aclk+			
J5-4	Aclk-			
J5-5	Ain2+			
J5-6	Ain2-			
J5-7	Ain1+			
J5-8	Ain1-			
J5-9	Ain0+			
J5-10	Ain0-			
J5-11	Bin3+			
J5-12	Bin3-			
J5-13	Bclk+			
J5-14	Bclk-			
J5-15	Bin2+			
J5-16	Bin2-			
J5-17	Bin1+			
J5-18	Bin1-			
J5-19	Bin0+			
J5-20	Bin0-			
J5-21	VCC-SW			VCC-SW is selected by JP3
J5-22	Ground			

<b>J6</b>	<b>Description</b>		<b>MFG</b>	<b>MFG P/N</b>
	<b>LVDS LCD POWER</b>		<b>Hirose</b>	<b>DF11-10DP-2DSA</b>
J6-1	12VDC			
J6-2	Ground			
J6-3	12VDC			
J6-4	Ground			
J6-5	VCC-SW			VCC-SW is selected by JP3
J6-6	Ground			
J6-7	VCC-SW			
J6-8	Ground			
J6-9	VCC-SW			
J6-10	Ground			

J2	Description		MFG	MFG P/N
	<b>DVI-D Video Input Connector</b>		<b>Hirose</b>	<b>DF11-16DP-2DSA</b>
J2-1	RX2-	Note: This connector is not installed		
J2-2	RX2+			
J2-3	RX1-			
J2-4	RX1+			
J2-5	RX0-			
J2-6	RX0+			
J2-7	GND			
J2-8	GND			
J2-9	GND			
J2-10	GND			
J2-11	RXC-			
J2-12	RXC+			
J2-13	SCL			
J2-14	SDA			
J2-15	5VDC			
J2-16	HOT PLUG			

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