

## 110664 LED Backlight Driver Board

- **Drives up to 8 LED strings. The # of strings is set at the factory**
- **Common Anode LED strings, or strings with individual anode/cathode are supported. Common Cathode NOT supported.**
- **Compatible with Westar VPx series of LCD controllers**
- **“PWM” digital brightness control input must be enabled at the factory.**
- **“SHDN” digital input is used to put the 110664 into a low power (shutdown) mode.**
- **If PWM is not enabled, then LED current is always at it maximum whenever the board is powered and SHDN is not asserted low.**
- **“PWM” and “SHDN” discretes are compatible with VPx-series of LCD controllers. Customers may incorporate these controls within “Power up” or “Power Down” sequence or via remote command.**

Figure 1: 110664 configurations with a) 4 LED strings with common anode and b) (4) LED strings with individual anode

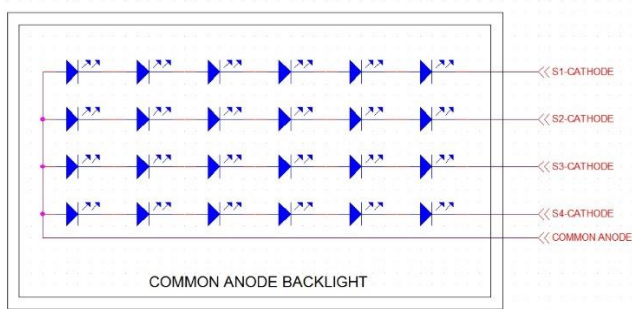


Figure 1a

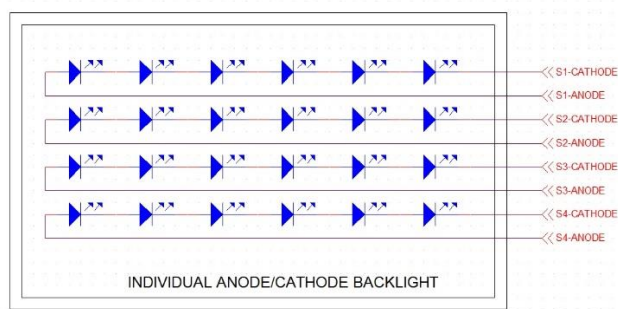


Figure 1b

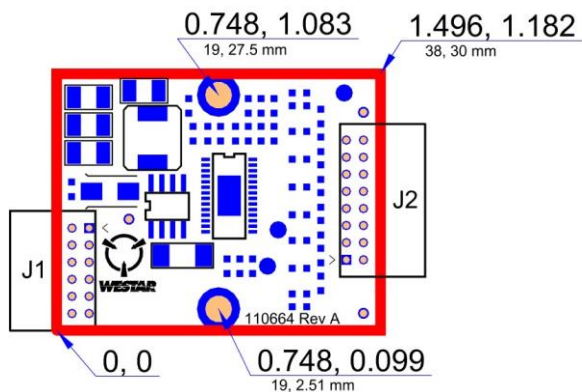


Figure 2 110664 Dimensions (mm)

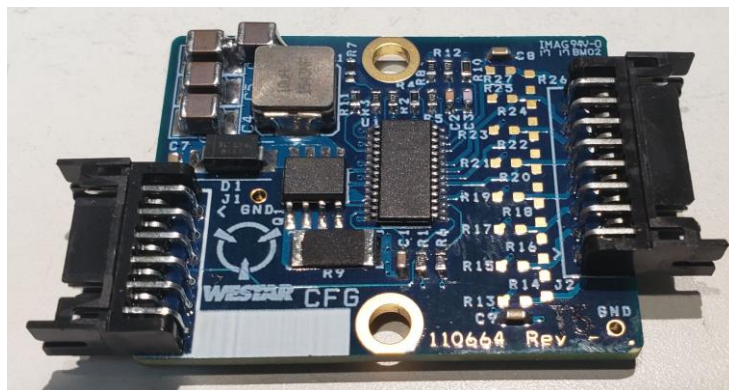


Figure 3. 110664 circuit card

## Connectivity:

J1 Input Connector (DF11-12DP-2DS (Hirose))		J2 Output Connector (DF11-16DP-2DS (Hirose))	
mates with DF11-12DS-2C (Hirose)		mates with : DF11-16DS-2C (Hirose)	
Mating Contact: DF11-2428SC (Hirose)		Mating Contact: DF11-2428SC (Hirose)	
Pin	Description	Pin	Description
<b>1</b>	Input Power	1	Cathode #1
<b>2</b>	PWM	3	Cathode #2
<b>3</b>	Input Power	5	Cathode #3
<b>4</b>	CTRL	7	Cathode #4
<b>5</b>	N/C	9	Cathode #5
<b>6</b>	RESERVED (must leave open)	11	Cathode #6
<b>7</b>	Ground	13	Cathode #7
<b>8</b>	N/C	15	Cathode #8
<b>9</b>	Ground	2,4,6,8,10,12,14,16	Anode
<b>10</b>	N/C		
<b>11</b>	Ground		
<b>12</b>	N/C		

## Application:

The 110664 complements the Westar VPx product for panels that require LED drive boards. Please send Westar your specific panel datasheet. Westar will recommend a LCD controller solution. If the 110664 is required, Westar will provide a unique 110664 configuration number and specify the LED drive configuration.

## Order Configuration:

The following configurations are already assigned.

Order Configuration	# of Strings	Cathode(s) active	Current (per String, mA)	Compliance Voltage (VDC)	PWM Enabled	SHDN Enabled?
110664_C001	1	1	30	18	No	Yes
110664_C002	4	1, 2, 3, 4	25	32	Yes	Yes
110664_C003	4	1, 2, 3, 4	25	31	Yes	Yes

Specifications:

Size	38mm x 30mm (1.496" x 1.182")
Temperature Range	Operating: 0°C to +70°C (additional data available) Storage: -40°C to +100°C
Input Power	8 – 14 VDC (Typically 12 VDC)
SHDN On/Off control	TTL logic, "High" turns on LED driver "Low" puts LED driver in low power mode
PWM Brightness Control	Digital input. Duty cycle determines percent of peak current. Recommended that PWM signal period is 50 msec (200 Hz)
# of LED Output strings	Up to 8
String Configurations	Independent anode/cathode Common anode Note: Common cathode not supported
Maximum current per string	Configured at factory (up to 100mA)
Maximum compliance voltage	Configured at factory (up to 45 VDC)

Please do not hesitate to contact us about your display. Westar will add additional configurations to this brochure as we deliver solutions to our customers. We can add a configuration for your application as long as the capabilities are within the specified constraints shown in the table above.