

lcdparts.net | store.lcdparts.net

7.2 Backlight Unit

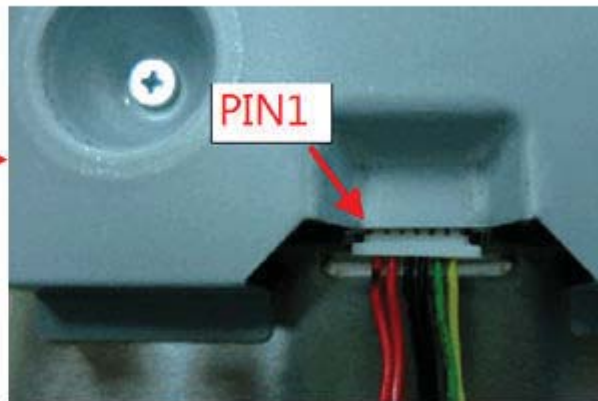
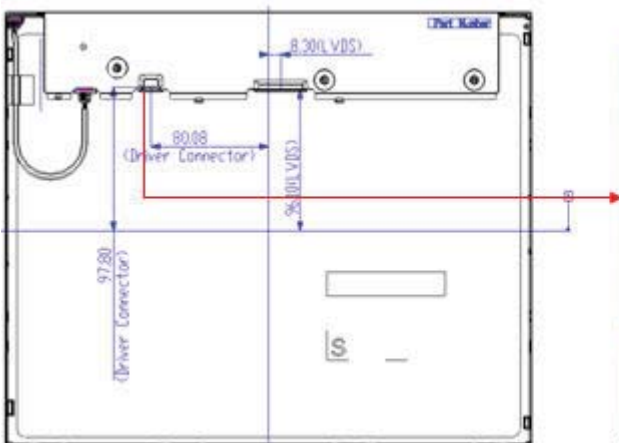
Physical interface is described as for the connector on module. These connectors are capable of accommodating the following signals and will be following components.

Connector Name / Designation	Lamp Connector
Manufacturer	E&T or compatible
Connector Model Number	3806K-F06Y-03R or compatible
Mating Connector Model Number	H208K-P06N-02B or compatible

lcdparts.net | store.lcdparts.net

7.2.1 Signal for LED driver connector

Pin#	Symbol	Signal Name
1	VCC	12V
2	VCC	12V
3	GND	GND
4	GND	GND
5	Display on	5V-On / 0V-Off
6	Dimming	PWM Dimming



lcdparts.net | store.lcdparts.net

5.2 Backlight Unit

lcdparts.net | store.lcdparts.net

Parameter guideline LED

Following characteristics are measured under stable condition at 25°C (Room Temperature)

Symbol	Parameter	Min.	Typ.	Max.	Unit	Remark
V_{LED}	Input Voltage	10.8	12	12.6	Volt	
I_{LED}	Input Current	-	1.18	-	A	100% Dimming
P_{LED}	Power Consumption	-	14.16	-	Watt	100% Dimming
$I_{INRUSH LED}$	Inrush Current	-	-	5.1	A	V_{LED} rising time ~ 470us
F_{PWM}	PWM Dimming Frequency	200	-	20K	Hz	Note 1,2
$V_{PWM DIM}$	Swing Voltage High	4.5	5.0	5.5	Volt	
	Swing Voltage Low	-	-	0.8	Volt	
D_{PWM}	Dimming Duty Cycle	10	-	100	%	
I_F	LED Forward Current	-	110	-	mA	Ta = 25°C
$V_{LED ON/OFF}$	On Control Voltage	3.0	3.3	5.5	Volt	Note 3, 4
	Off Control Voltage	-	-	0.8	Volt	
Operating Life		50000	-	-	Hrs	Note 5, 6

Note 1: PWM dimming function can be operated by PWM signal. PWM duty cycle can adjust white Luminance.
(PWM High: ON and PWM Low: OFF)

Note 2: PWM signal can not be floating and pull-down to ground when waiting.

Note 3: Enable ($V_{LED On/Off}$) must be turned on late than V_{LED} and PWM Signal.

Note 4: Enable ($V_{LED On/Off}$) must be turned off early than V_{LED} and PWM Signal.

Note 5: If G170EG01 V1 module is driven by high current or at high ambient temperature & humidity condition. The operating life will be reduced.

Note 6: Operating life means brightness goes down to 50% initial brightness. Minimum operating life time is estimated data.

lcdparts.net | store.lcdparts.net