

☒ Preliminary Specifications

☐ Final Specifications

Title	Backlight Driving Board
Model Name	DB-LD0B-07
Version	Rev.3

Customer	
<hr/>	
Approved by	Date
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Notice : This Specification is subject to change without notice.	

Approved By	Prepared By
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### Revised Record

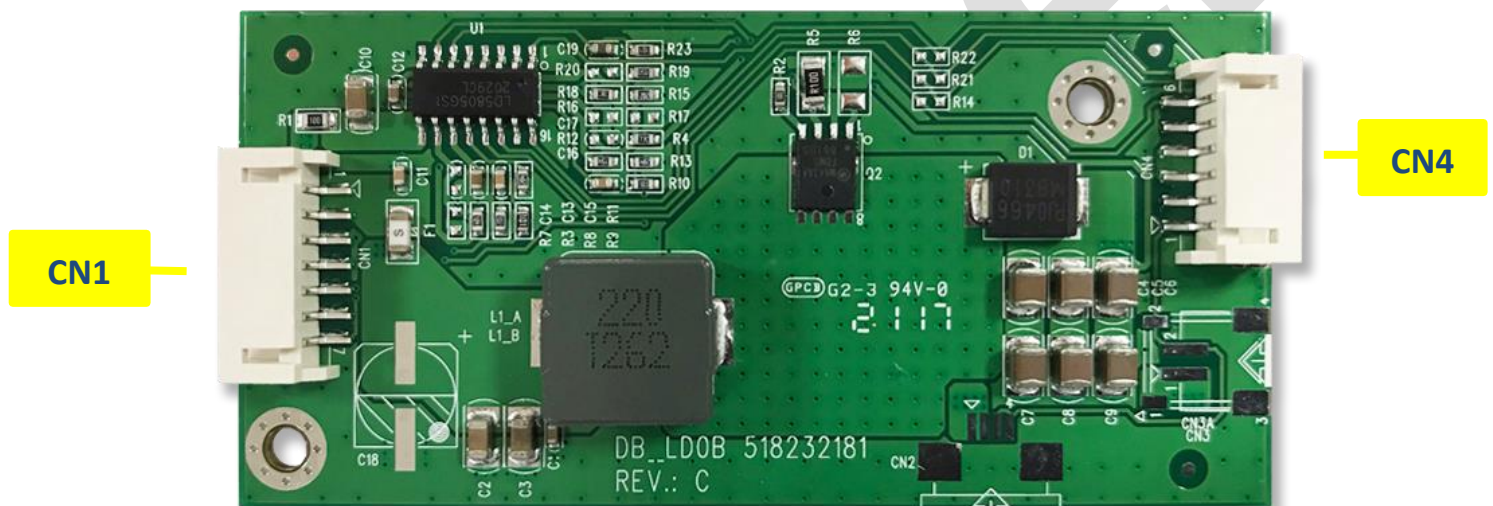
Version	Date	Revised Content/Summary	Page	Remark
0	2020/02/19	Final Specification was first issued	All	
1	2020/07/02	Update 3.Electrical Characteristics a. Voff Min.0V =>Voff Min.--- b. PWM Level =>PWM High Level c. PWM Low Level Max.=0.5V d. Duty Ratio Min.0%=>PWM Duty Cycle Min.5% e. Frequency =>PWM Frequency	5	
2	2020/12/28	Modify data error, 4.1 Input Connector Location – CN1 : STM MS24017R => MS24267R 4.2 Output Connector Location – CN4 : STM MS24016R => MS24266R	6	
3	2022/05/17	Update PCB Rev.B => Rev.C	4	
		Update Mechanical Characteristics	7	

## 1.General Function

This is a high efficiency LED backlight driver board which is capable to driving up to 4 channels of LED string. This board provides the user with OVP and OCP features.

This Product Specification is made to be the standard of TWScreen manufactured LED Driving Board such a standard will be followed in TWScreen production, shipment, and quality inspection.

## 2.Interface



2-1. CN1 : Input Connector

2-2. CN4 : Output Connector

### 3.Electrical Characteristics

<u>Parameter</u>		<u>Min.</u>	<u>Typ.</u>	<u>Max.</u>	<u>Unit</u>
Input Voltage	Vin	10.8	12.0	26	V
Input Current	Iin	---	3	---	A
Output Voltage	Vout	---	---	80	V
Efficiency	Eff.	---	80	---	%
Sub Current	Iout	---	80	---	mA
Total Current	Iout	---	320	---	mA
LED ON/OFF	Von	2.5	---	5.0	V
	Voff	---	---	0.5	
Dimming	PWM High Level	2.5	---	5.0	V
	PWM Low Level	---	---	0.5	V
	PWM Duty Cycle	5	---	100	%
	PWM Frequency	0.1	---	20	KHz

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\*\*\* Depend on panel type

## 4.Interface Characteristics

### 4.1. Input Connector

Location – CN1 : 7pin wafer , pitch 2.0mm R/A , STM MS24267R or equiv

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	+12 V	4	GND	7	ADJ
2	+12 V	5	ON/OFF		
3	GND	6	NC		

### 4.2. Output Connector

Location – CN4 : 6pin wafer , pitch 2.0mm R/A , STM MS24266R or equiv

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol
1	IRLED_1	4	VLED+
2	IRLED_2	5	IRLED_3
3	VLED+	6	IRLED_4

### 5.Mechanical Characteristics

Dimension: 84(L) \*40.8(W) \*8.5(H) mm

Weight: MAX. 20g

