



#### ■ Preliminary Specifications

#### ☐ Final Specifications

Title	Backlight Driving Board	
Model Name	DB-LD0B-18	
Version	Rev.3	

Approved by

Date

Notice: This Specification is subject to change without notice.

Approved By	Prepared By
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2022/05/17	2022/05/17



# Product Specification DB-LD0B-18

# **Contents**

1.GENERAL FUNCTION	4
2.INTERFACE	4
3.ELECTRICAL CHARACTERISTICS	5
4.INTERFACE CHARACTERISTICS	6
E MECHANICAL CHADACTEDISTICS	_





# Product Specification DB-LD0B-18

# **Revised Record**

	I	T		
Version	Date	Revised Content/Summary	Page	Remark
0	2020/02/19	Final Specification was first issued	All	
		Update 3.Electrical Characteristics  a. Voff Min.0V =>Voff Min  b. PWM Level =>PWM High Level		
1	2020/07/02	<ul><li>c. PWM Low Level Max.=0.5V</li><li>d. Duty Ratio Min.0%=&gt;PWM Duty Cycle Min.5%</li><li>e. Frequency =&gt;PWM Frequency</li></ul>	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		
3 2022/03/17		Update Mechanical Characteristics	7	

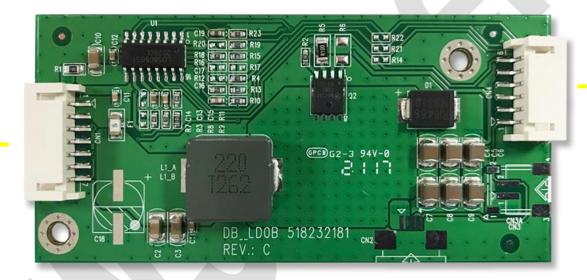


#### 1.General Function

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

#### 2.Interface



CN1

2-1. CN1 : Input Connector2-2. CN4 : Output Connector

CN<sub>4</sub>



# 3. Electrical Characteristics

<u>Para</u>	Min.	Typ.	Max.	<u>Unit</u>		
Iput Voltage	Vin	10.8	12.0	26	V	
Input Current	lin	lin			Α	
Output Voltage	Vout			61	V	
Efficiency	Eff.		80		%	
Sub Current	lout		78	<u></u>	mA	
Total Current	lout		312		mA	
LED ON/OFF	Von	2.5		5.0	V	
LED ON/OFF	Voff			0.5	V	
	PWM High Level	2.5		5.0	V	
Dimmina	PWM Low Level	<b></b>		0.5	V	
Dimming	PWM Duty Cycle	5		100	%	
	PWM Frequency	0.1		20	KHz	

\*\*\* 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

