

☒ Preliminary Specifications

☐ Final Specifications

Title	Backlight Driving Board
Model Name	DB-LD0H-04
Version	Rev.0

Customer	
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Approved by	Date
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Notice : This Specification is subject to change without notice.	

Approved By	Prepared By
Tony Chiu 2022/05/18	Frank Kuo 2022/05/18

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TWScreen

Revised Record

Version	Date	Revised Content/Summary	Page	Remark
0	2022/05/18	Final Specification was first issued	All	

1.General Function

This is a high efficiency LED backlight driver board which is capable to driving up to 4 channels merged into one 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. CN2 : 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	20	V
Input Current	Iin	---	1	---	A
Output Voltage	Vout	---	---	40	V
Efficiency	Eff.	---	80	---	%
Sub Current	Iout	---	210	---	mA
Total Current	Iout	---	210	---	mA
LED ON/OFF	Von	2.5	---	5.0	V
	Voff	0	---	0.5	
Dimming	PWM Level	2.5	---	5.0	V
	Duty Ratio	5	---	100	%
	Frequency	0.2	---	20	KHz

*** Depend on panel type

4.Interface Characteristics

4.1. Input Connector

Location – CN1 : 8pin wafer , pitch 1.0mm SMD , ACES 50224-008 or equivalent

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol	Pin No.	Symbol
1	GND	4	ADJ	7	+12 V
2	GND	5	ON/OFF	8	+12 V
3	GND	6	+12 V		

4.2. Output Connector

Location – CN2 : 6pin wafer , pitch 1.0mm SMD , ACES 50224-006 or equivalent

Pin Assign and Definition

Pin No.	Symbol	Pin No.	Symbol
1	VLED+	4	IRLED
2	VLED+	5	IRLED
3	IRLED	6	IRLED

5.Mechanical Characteristics

Dimension: 50(L) *30(W) *4.02(H) mm

