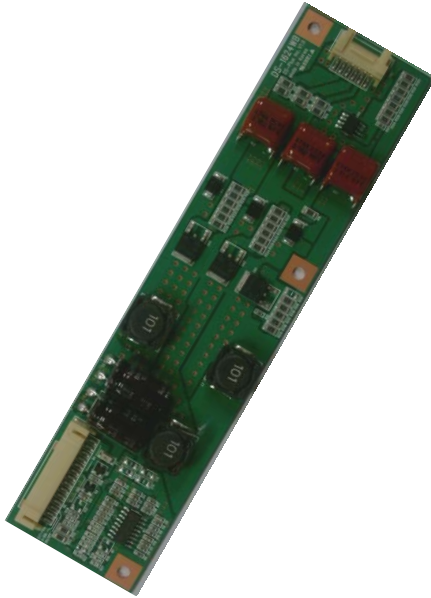


DS-1624WB



Features

- Nominal current 350 mA for LED Back-light
- 21.6 to 26.4 V input voltage range
- Accurate and stable output current regulation
- Analog dimming or External-PWM dimming selectable
- Protection against load open or over voltage
- High efficiency
- Low EMI and spurious noise
- Built-in Fuse
- Single sided PCB layout

Applications

- 24" Wide LED Back-light LCD monitor

Electrical characteristics for Analog dimming

Parameter	Symbol	Conditions*	Specification*			Unit
			Min	Typ	Max	
Input supply voltage	V_{IN}		21.6	24.0	26.4	V
Input current	I_{IN}	$V_{IN}=24V, V_{BRT}=3.3V$	2.7	3.2	3.7	A
Full bright LED current	$I_{O(MAX)}$	$V_{IN}=24V, V_{BRT}=3.3V$	320	350	380	mA
Minimum LED current	$I_{O(MIN)}$	$V_{IN}=24V, V_{BRT}=0V$	50	75	100	mA
Dimming ratio		$V_{IN}=24V, V_{BRT}=3.3$ to $0V$		5 : 1		
Sleep current	I_{IN}	$V_{IN}=24V, V_{SLEEP}=3.3V$			10	mA

Electrical characteristics for External-PWM dimming

Parameter	Symbol	Conditions*	Specification*			Unit
			Min	Typ	Max	
Input supply voltage	V_{IN}		21.6	24.0	26.4	V
Input current	I_{IN}	$V_{IN}=24V, Duty=100%$	2.7	3.2	3.7	A
Full bright LED current	$I_{O(MAX)}$	$V_{IN}=24V, Duty=100%$	320	350	380	mA
Minimum LED current	$I_{O(MIN)}$	$V_{IN}=24V, Duty=20%$	30	55	80	mA
Dimming ratio		$V_{IN}=24V, Duty=100\sim 0%$		100 : 1		
Sleep current	I_{IN}	$V_{IN}=24V, V_{SLEEP}=0V$			10	mA

* At the reference 24" LCD-Module(LM240WU6) of LG Display

DS-Plus Inc./ (주)디에스플러스

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Tel : 82-31-608-7100~3, Fax : 82-31-608-7104

Absolute maximum ratings

Input supply voltage (V_{IN})	-----	-0.3V to 26.4V
Output voltage, no load	-----	Internally limited to zero volt
Output current (I_O)	-----	400mA
Sleep & Bright adjust signal voltage (V_{SLEEP} , V_{BRT})	-----	-0.3V to 10.0V
Ambient operating temperature	-----	0 °C to 50 °C
Storage temperature range	-----	-30 °C to 80 °C
Operating & storage humidity	-----	10 % to 85 %

Recommended operating conditions (R.C.)

Parameter	Symbol	Recommendation			Units
		Min	R.C.	Max	
Input supply voltage	V_{IN}	23.0	24.0	25.0	V
Full bright LED current	$I_{O(MAX)}$	320	350	380	mA
Brightness control voltage range(Analog dim)	V_{BRT}	0		3.3	V
Brightness control PWM Duty(Ext-PWM dim)	Duty	0		100	%
Lamp on/off control voltage	V_{SLEEP}	3.0	5.0	7.0	V
LED operating voltage	V_O		64.0		V
Operating ambient temperature range	T_A	0		40	°C

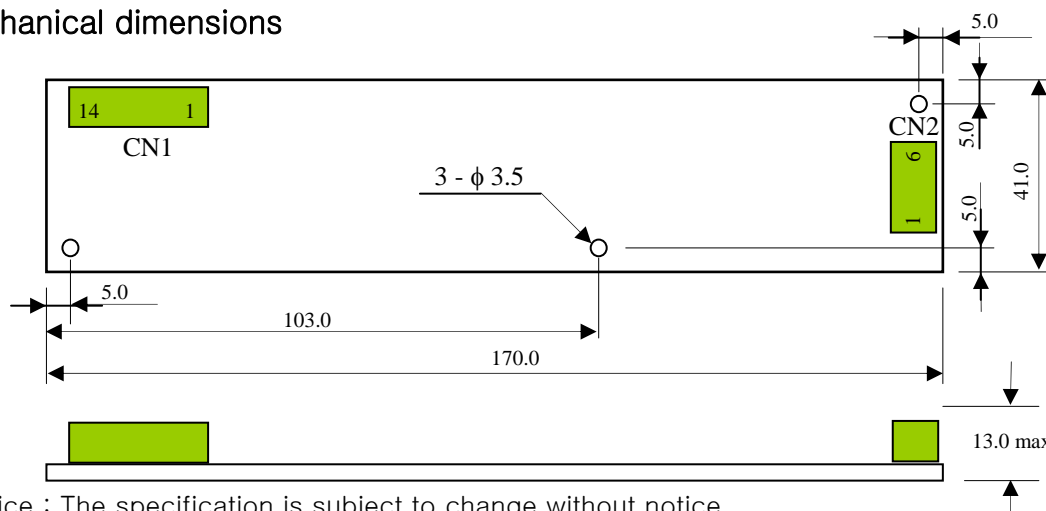
Connector and functional pin description

- CN1 Connector : 20022WR-14A00 (YEONHO or Equivalent)
- CN1-1,2,3,4,5 V_{IN} (DC Input ; 24.0V)
- CN1-6,7,8,9,10 G_{ND}
- CN1-12 V_{SLEEP} (Back-light On/Off control ; Off at Low, On at High)
- CN1-13 V_{BRT} (Analog Dimming-Bright adjust ; 3.3 to 0V)
- CN1-14 External-PWM Dimming control (Bright Adjust)
(5Vpp, Duty 100 to 0% square wave input)

- CN2 Connector : 20037WR-06 (YEONHO or Equivalent)
- CN2-2,3,5 LED(Anode) operating voltage
- CN2-1,4,6 Current return

Tolerance : ± 0.5
Unit : mm

Mechanical dimensions



Notice : The specification is subject to change without notice