

LX23108AL

8 Ports LED Back Light High Voltage Driver **DATA SHEET**

DESCRIPTION

LX23108AL - is a compact 8 Ports The LX23108AL LED Driver enables White or RGB back light LED Driver, a wide dimming range, achieved to be used in large display notebooks, through a combination of LED current LCD monitors, and TV sets. designed to work together with the control. In addition, the chipset LX24132 LED Controller as a chipset, provides a thermally robust solution driving up to 32 LED strings with a through advanced system control; variable current of up to 200mA peak. including Drain Voltage Sensing for In addition, the LX23108AL provides the LX24132 LED Controller with its ports voltage samples, that facilitate the control of the LED strings supply The LX23108AL LED Driver is voltage through an external DC/DC housed in a 32 pin, 5mmx5mm QFN converter; minimizing the power package. dissipation while regulating the LED currents for all 8 strings. Current regulation is maintained within a \pm 3 percent.

The LX23108AL LED Driver includes 8 High Bandwidth Current Limiter Cells with PWM Control (ON/OFF Signal).

The chip is designed to operate with external Sense Resistors. Such configuration provides maximum flexibility for system designers when scaling up or down the LED currents for meeting a wide range of high accuracy application requirements.

It is amplitude and PWM duty-cycle Open/Shorts events and per string Thermal Protection monitoring.

KEY FEATURES

- White LED, or RGB Backlight Driver for large size display panels
- Up to 8 LED strings with \pm 0.5% precision current matching.
- Wide dimming ratio with PWM duty-cycle and LED current amplitude controls.
- 12 bit PWM duty-cycle resolution controlled by LX24132 LED Controller.
- 8 bit resolution for LED current setting controlled by LX24132 LED Controller.
- Open string, short LED and Over-Temperature protection per individual channel.

APPLICATIONS

- LCD Monitor and TV
- Large Signage Display

IMPORTANT: For the most current data, consult *MICROSEMI*'s website: http://www.microsemi.com

	PACKAGE ORDER INFO	THERMAL DATA
T _A (°C)	MLPQ Plastic 5 x5mm 32 pin	27.5 ° C/W According to the JESD51-7
	RoHS Compliant / Pb-free / MSL 1	THERMAL RESISTANCE-JUNCTION TO AMBIENT
-40 to 85	LX23108ALILQ	Junction Temperature Calculation: $T_J = T_A + (P_D \times \theta_{JA})$.
Note: Available in Tape & Reel. Append the letters "TR" to the part number.		The θ_{JA} numbers are guidelines for the thermal performance of the device/pc-board system. All of the above assume no ambient airflow.

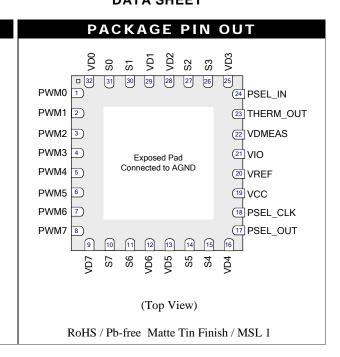


ABSOLUTE MAXIMUM RATINGS

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Notes: Exceeding these ratings could cause damage to the device. All voltages are with respect to Ground. Currents are positive into, negative out of specified terminal.



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