

# LX1697

www.*Microsemi*.com

**High Performance CCFL Controller** 

#### **PRODUCTION DATA SHEET**

### DESCRIPTION

back lighting applications.

Its brightness control architecture content.

Digital Dimming duty cycle is controlled by providing either a dc BRITE D pin. Burst frequency can be controlled either by the on chip burst oscillator or directly by a low frequency PWM logic signal at BRITE D.

The LX1697 includes a built in to 5.1V regulator so it can be operated interfaced backlight control system. directly from the battery without the the system. The controller's power

The LX1697 is a high performance stage consists of direct coupled full CCFL controller optimized for wide bridge high voltage drivers for the input voltage range notebook display external N-channel high side and Nchannel low side power FETs.

The LX1697 includes lamp current supports Intel's DPST (Display Power and open lamp voltage regulation, Saving Technology) that adjusts the fully programmable lamp frequency and brightness as a function of video burst dimming frequency oscillators, and our patented fool-proof lamp strike circuitry.

Additional features comprise an enable voltage or a digital PWM signal to the input, under-voltage lockout, analog programmable open lamp strike timeout, over voltage, and short circuit fault detection.

> The LX1697 can also be used with Microsemi's LX1801 SMBus controller provide a completely digital

The LX1697 is available in the 24 need of an external 5V supply from pin 4x4 mm MLPQ surface mount package and is specified from -20°C to 70°C.

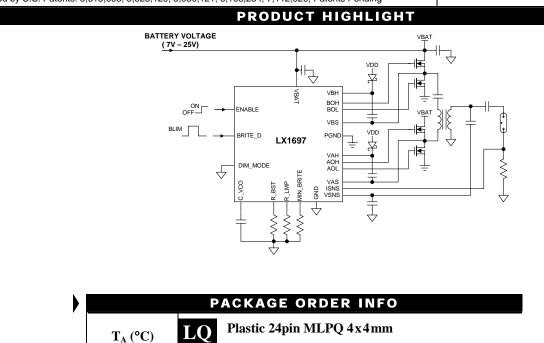
IMPORTANT: For the most current data, consult MICROSEMI's website: http://www.microsemi.com Protected by U.S. Patents: 5,615,093; 5,923,129; 5,930,121; 6,198,234; 7,112,929; Patents Pending

### **KEY FEATURES**

- . 7 to 25 Volts Wide Input Voltage Range
- Resistor Programmable Lamp Operating Frequency within ±3% Tolerance
- **Resistor Programmable Burst**
- Operating Frequency Support Intel<sup>™</sup> DPST for System **PWM** input
- Compatible with Microsemi's new SMBus CCFL controllers
- . Fully Programmable Open Lamp and Load Fault Time Outs
- On Chip Full Wave Rectifiers for Lamp Voltage and Current
- Cost Effective and Low Parts Count **Inverter Modules**
- Uses Industry Standard High Voltage Transformers

#### APPLICATIONS

- Note Book LCD displays
- **Transportable Computers**
- Web Tablet LCD displays



#### RoHS Compliant / Pb-free

LX1697CLQ

Note: Available in Tape & Reel. Append the letters "TR" to the part number. (i.e. LX1697CLQ-TR)

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## INFORMATION

Thank you for your interest in Microsemi<sup>®</sup> Analog Mixed Signal products.

The full data sheet for this device contains proprietary information.

To obtain a copy, please contact your local Microsemi sales representative. The name of your local representative can be obtained at the following link http://www.microsemi.com/contact/contactfind.asp

or

Contact us directly by sending an email to:

IPGdatasheets@microsemi.com

Be sure to specify the data sheet you are requesting and include your company name and contact information and or vcard.

We look forward to hearing from you.