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FAN7318

LCD Backlight Inverter Drive IC

Features

- High-Efficiency Single-Stage Power Conversion
- Wide Input Voltage Range: 6V to 30V
- Backlight Lamp Ballast and Soft Dimming
- Minimal External Components Required
- Precision Voltage Reference Trimmed to 2%
- Half-Bridge Topology
- Soft-Start
- PWM Control at Fixed Frequency
- Analog Dimming Function
- Burst Dimming Function
- Programmable Striking Frequency
- Open-Lamp Protection
- Open-Lamp Regulation
- Short-Lamp Protection
- CMP-High Protection
- FB-High Protection
- Thermal Shutdown
- 20-Pin SOIC

Applications

- LCD TV
- LCD Monitor

Description

The FAN7318 is a LCD backlight inverter drive IC that controls P-N half-bridge topology.

The FAN7318 provides a low-cost solution and reduces external components by integrating proprietary wave rectifiers for open-lamp protection and regulation. The operating voltage range of the FAN7318 is wide, so an external regulator isn't necessary to supply the voltage to the IC.

The FAN7318 provides various protections, such as open-lamp regulation, open-lamp protection, short-Lamp protection, CMP-high protection, and FB-high protection, to increase the system reliability. The FAN7318 provides burst dimming and analog dimming.

The FAN7318 is available in a 20-SOIC package.

20-SOIC



Ordering Information

| Part Number | Operating Temperature | Package | Eco Status | Packing Method |
|-------------|-----------------------|--|------------|----------------|
| FAN7318M | -25 to +85°C | 20-Lead, Small Outline Integrated Circuit (SOIC) | RoHS | Rail |
| FAN7318MX | | | | Tape & Reel |

For Fairchild's definition of "green" Eco Status, please visit: http://www.fairchildsemi.com/company/green/rohs_green.html.

Protected under U.S. patent nos. 5,652,479.

Typical Application Circuit (LCD Backlight Inverter)

| Application | Device | Input Voltage Range | Number of Lamps |
|---------------------|---------|---------------------|-----------------|
| 22-Inch LCD Monitor | FAN7318 | 15V ± 10% | 4 |

1. Features

- High-Efficiency Single-Stage Power Conversion
- P-N Half-Bridge Topology
- Reduces Required External Components
- Enhanced System Reliability through Protection Functions

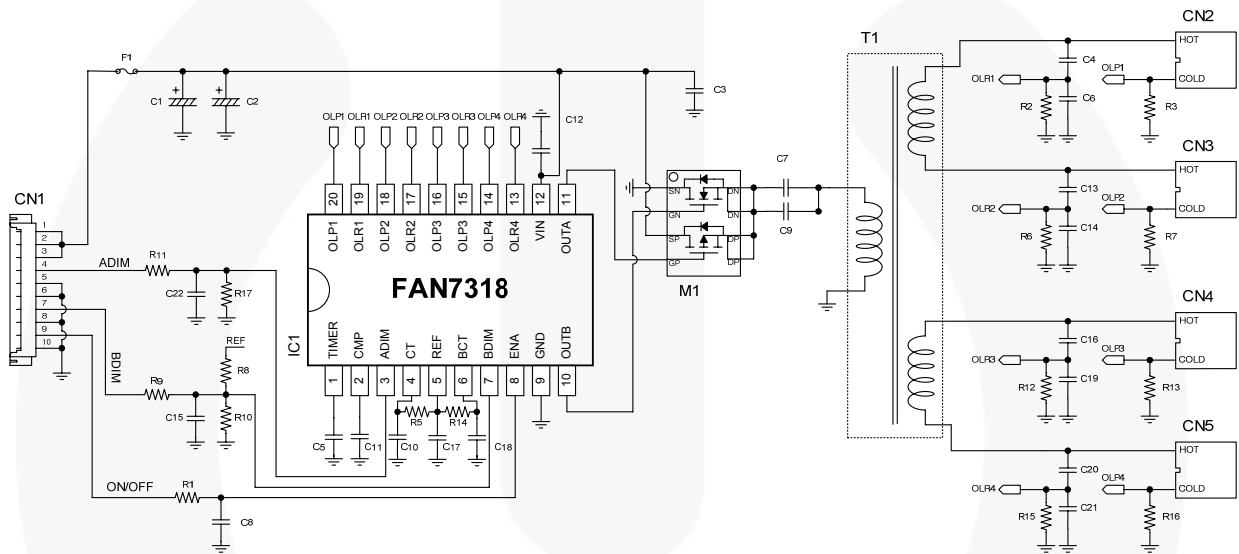


Figure 63. Typical Application Circuit



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|--------------------------|-----------------------|---|
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