



# 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](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

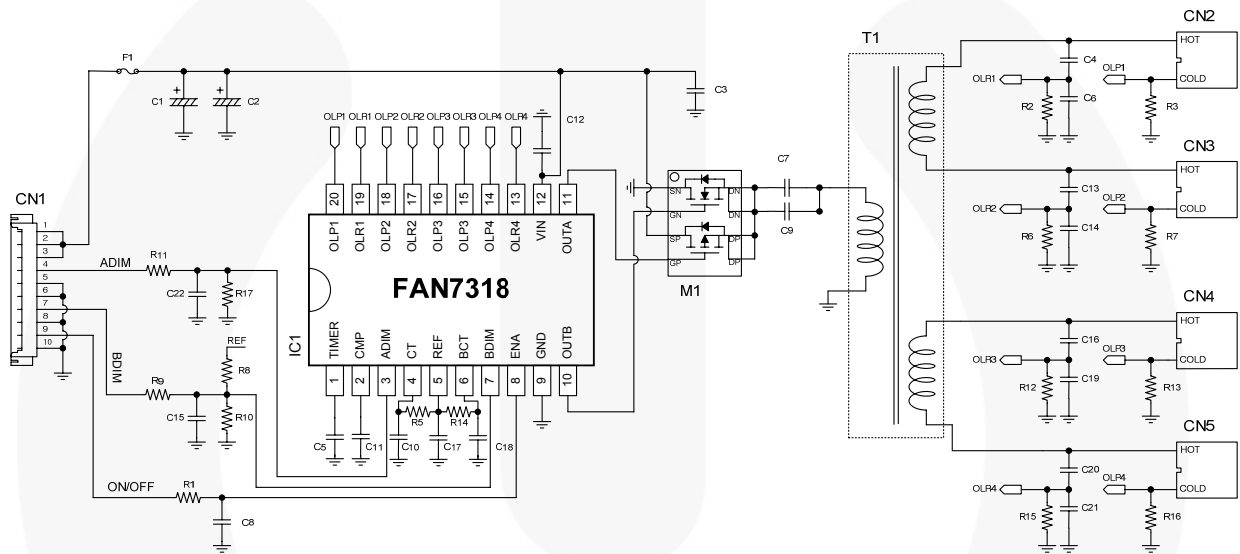




Figure 63. Typical Application Circuit

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