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FAN7318A

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 (OLP)
- Open-Lamp Regulation (OLR)
- Over-Voltage Protection (OVP)
- Short-Lamp Protection (SLP)
- CMP-High Protection (CHP)
- Thermal Shutdown (TSD)
- 16-Pin SOIC Package

Applications

- LCD TV
- LCD Monitor

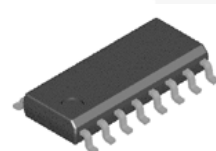
Description

The FAN7318A is a LCD backlight inverter drive IC that controls P-N half-bridge topology.

The FAN7318A provides a low-cost solution and reduces external components by integrating proprietary wave rectifiers for open-lamp protection and regulation. The operating voltage range is wide, so an external regulator isn't necessary to supply voltage to the IC.

The FAN7318A provides various protections, such as open-lamp regulation, over-voltage protection, open-lamp protection, short-lamp protection, and CMP-HIGH protection, to increase the system reliability. The FAN7318A provides burst dimming and analog dimming.

The FAN7318A is available in a 16-SOIC package.



Ordering Information

| Part Number | Operating Temperature | Package | Eco Status | Packing Method |
|-------------|-----------------------|--|------------|----------------|
| FAN7318AM | -25 to +85°C | 16-Lead, Small Outline Integrated Circuit (SOIC) | RoHS | Rail |
| FAN7318AMX | | | | Tape & Reel |

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

Typical Application Circuit (LCD Backlight Inverter)

| Application | Device | Input Voltage Range | Number of Lamps |
|---------------------|----------|---------------------|-----------------|
| 22-Inch LCD Monitor | FAN7318A | 15V±10% | 2 |

1. Features

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

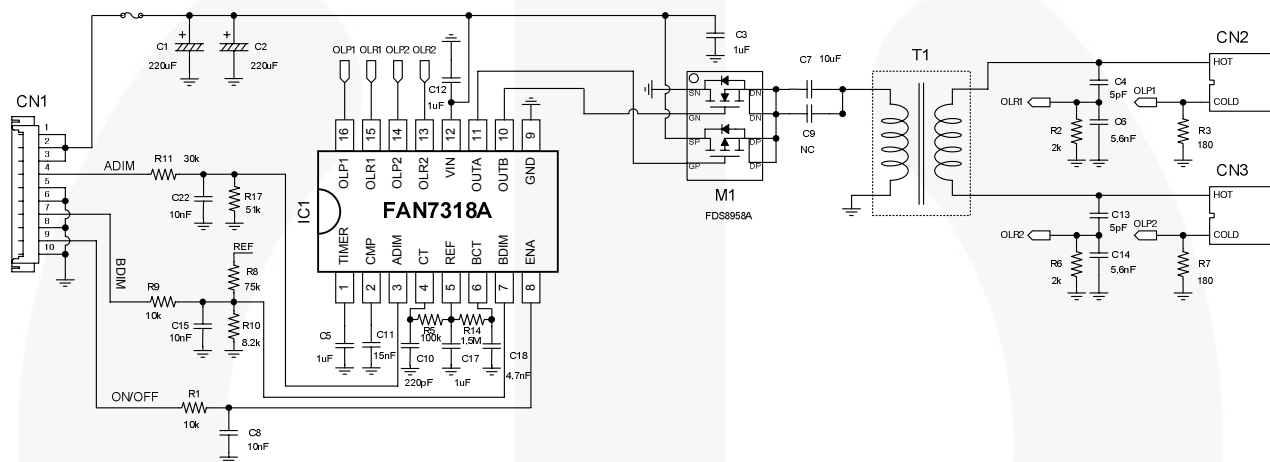


Figure 64. Typical Application Circuit

Physical Dimensions

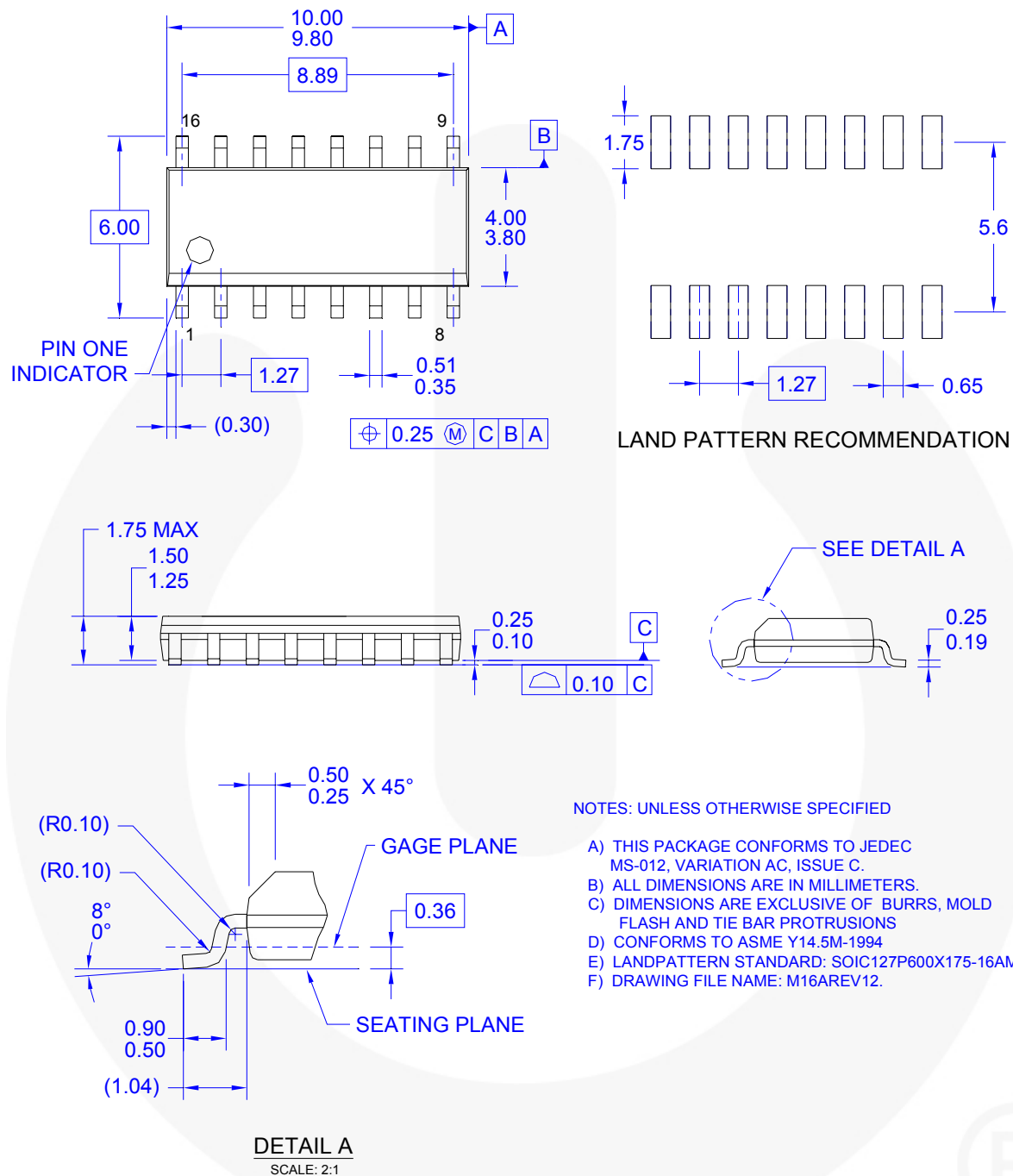


Figure 65. -Lead, Small Outline Integrated Circuit (SOIC) Package

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