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FAN7311B LCD Backlight Inverter Drive IC

Features

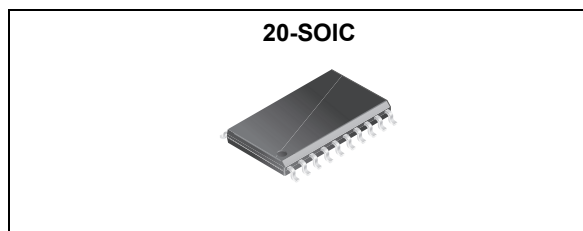
- High-Efficiency Single-Stage Power Conversion
- Wide Input Voltage Range: 5V to 25.5V
- Backlight Lamp Ballast and Soft Dimming
- Reduced Number of Required External Components
- Precision Voltage Reference Trimmed to 2%
- ZVS Full-Bridge Topology
- Soft-Start Capability
- PWM Control at Fixed Frequency
- Analog and Burst Dimming Function
- Programmable Striking Frequency
- Open-Lamp Protection
- Open-Lamp Regulation
- 20-Pin SOIC

Applications

- LCD TV
- LCD Monitor

Description

The FAN7311B provides all the control functions for a series parallel resonant converter as well as a pulse width modulation (PWM) controller to develop a supply voltage. Typical operating frequency range is between 30kHz and 250kHz, depending on the cold cathode fluorescent lamp (CCFL) and the transformer's characteristics. The FAN7311B uses a new patent-pending phase-shift control.



Ordering Information

Part Number	Package	Pb-Free	Operating Temperature Range	Packing Method
FAN7311BM	20-SOIC	Yes	-25°C to 85°C	Rail
FAN7311BMX	20-SOIC	Yes		Tape & Reel

Protected by U.S. Patent: 5,652,479; 7,158,390.

Typical Application Circuits

Application	Lamps	Input Voltage
19-inch LCD Monitor	4	13V

1. Schematic

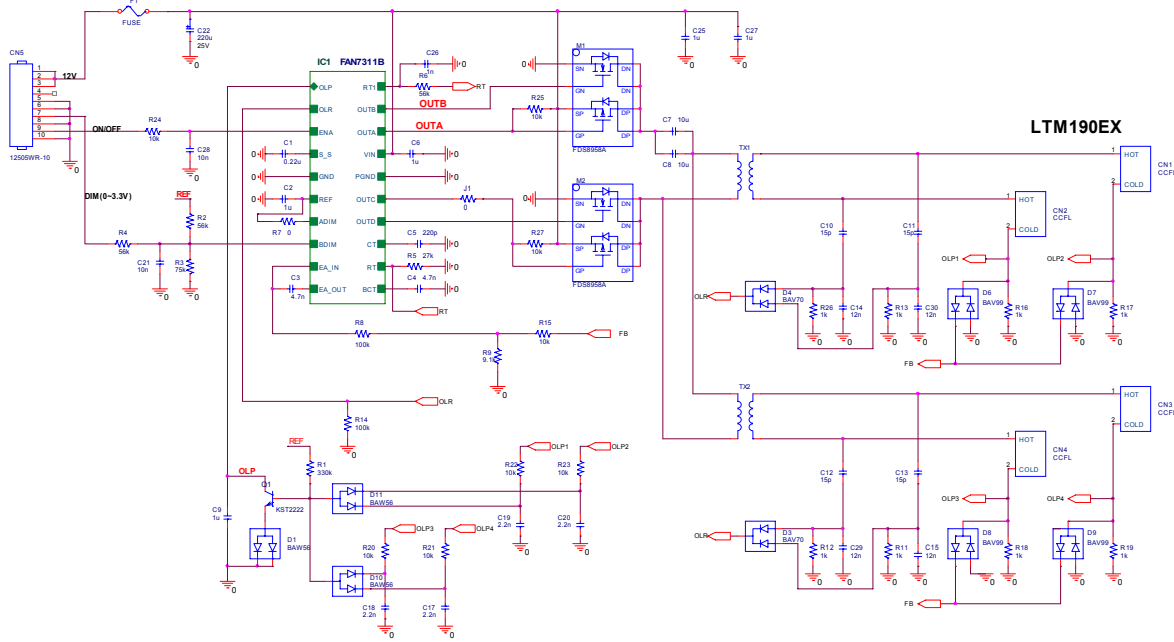
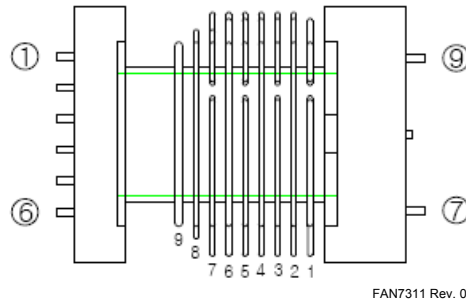


Figure 10. Typical Application Circuit

2. Transformer Schematic Diagram

- Supported by Namyang electronics (<http://www.namyangelec.co.kr>)



FAN7311 Rev. 04

Figure 11. Transformer Schematic

3. Core & Bobbin

- Core: EFD2124
- Material: PL7
- Bobbin: EFE2124

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FASTr™	MicroPak™	QT Optoelectronics™	TinyPWM™	
FPS™	MICROWIRE™	Quiet Series™	TinyPower™	
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Programmable Active Droop™				

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