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May 2007

FAN7310 LCD Backlight Inverter Drive Integrated Circuit

Features

- High-Efficiency, Single-Stage Power Conversion
- Wide Input Voltage Range: 5V to 24V
- Backlight Lamp Ballast and Soft Dimming
- Reduce External Components
- Precision Voltage Reference Trimmed to 2%
- ZVS full-bridge topology
- Soft-Start Feature
- PWM Control at Fixed Frequency
- Analog and Burst Dimming Function
- Synchronizable Switching Frequency with External Signal
- Open-Lamp Protection
- Open-Lamp Regulation
- 20-Pin SSOP

Applications

- LCD TV
- LCD Monitor

Description

The FAN7310 provides all the control functions for a series parallel resonant converter and contains a pulse width modulation (PWM) controller to develop a supply voltage. Typical operating frequency range is between 30kHz and 250kHz, depending on the CCFL and the transformer's characteristics. The FAN7310 has a patent-pending on phase-shift control.

20-SSOP



Ordering Information

Part Number	Package	Pb-Free	Operating Temperature Range	Packing Method
FAN7310G	20-SSOP	Yes	-25°C ~ 85°C	Rail
FAN7310GX	20-SSOP	Yes	-23 0 ~ 83 0	Tape & Reel

Typical Application

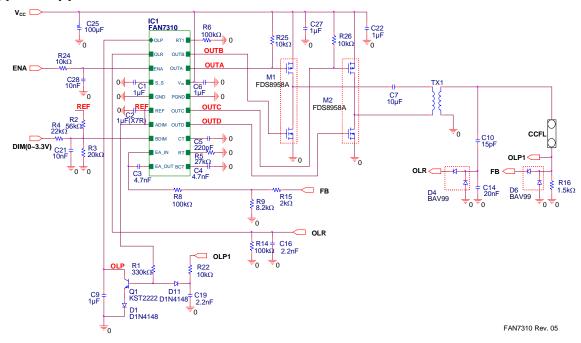


Figure 1. Application Circuit for CCFL

Internal Block Diagram

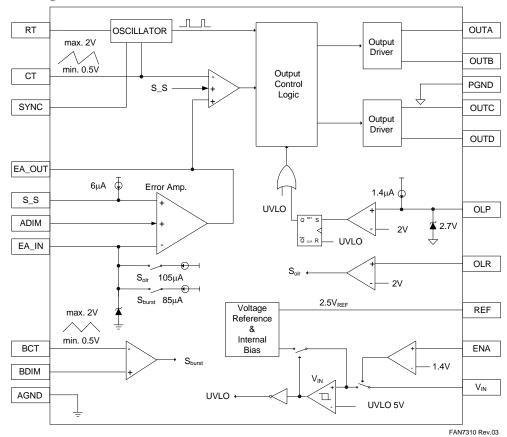


Figure 2. Functional Block Diagram





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FAST [®] FastvCore [™] FPS [™] FRFET [®] Global Power Resource [™] Green FPS [™]	OPTOLOGIC® OPTOPLANAR® PDP-SPM™ Power220® Power247® POWEREDGE®	SPM [®] STEALTH™ SuperFET™ SuperSOT™-3 SuperSOT™-6 SuperSOT™-8	TinyWire™ μSerDes™ UHC® UniFET™ VCX™

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