

October 2007

FAN7314 LCD Backlight Inverter Drive IC

Features

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

Description

The FAN7314 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 CCFL and the transformer's characteristics.





Ordering Information

Part Number	Package	Operating Temperature Range	Packing Method
FAN7314M	20-SOIC	-25°C ~ 85°C	Rail
FAN7314MX	20-SOIC	-23 6 103 6	Tape & Reel



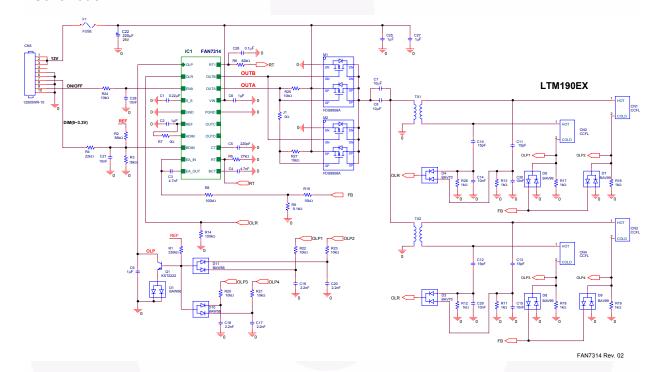
All packages are lead free per JEDEC J-SDD-020B standard.

Protected by U.S. Patent: 5,652,479.

Typical Application Circuit

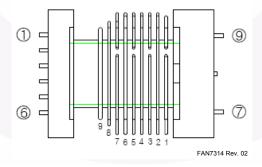
Application	Lamps	Input Voltage
19 inch LCD Monitor	4	13V

1. Schematic



2. Transformer Schematic Diagram

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



3. Core & Bobbin

Core: EFD2124Material: PL7Bobbin: EFE2124





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Green FPS™ Green FPS™ e-Series™ GTO™ i-Lo™ IntelliMAX™ ISOPLANAR™ MegaBuck™ MICROCOUPLER™

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QFET QS™ QT Optoelectronics™ Quiet Series™ RapidConfigure™ SMART START™ SPM[®] STEALTH™ SuperFET™ SuperSOT™-3 SuperSOT™-6

SuperSOT™-8 SyncFET™ The Power Franchise® p wer

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition	
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.	
Preliminary	First Production	This datasheet contains preliminary data; supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.	
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