

# 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.

20-SOIC



### Ordering Information

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



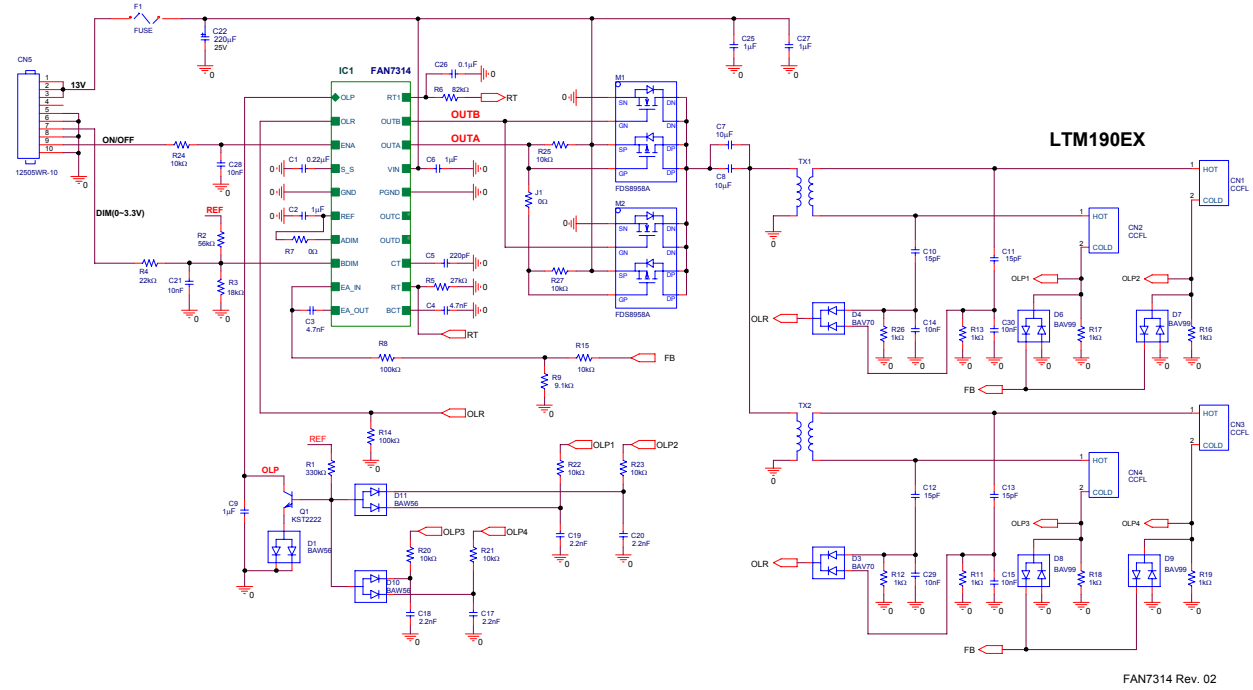
All packages are lead free per JEDEC J-SDD-020B standard.

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

## Typical Application Circuit

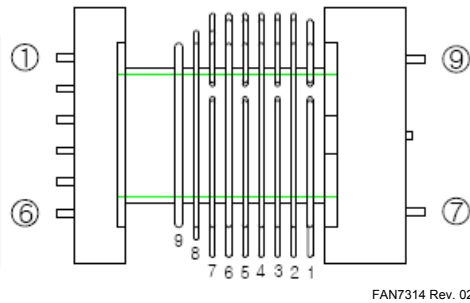
| Application         | Lamps | Input Voltage |
|---------------------|-------|---------------|
| 19 inch LCD Monitor | 4     | 13V           |

### 1. Schematic



### 2. Transformer Schematic Diagram

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




### 3. Core & Bobbin

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



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| FPS <sup>™</sup>                     |  <sup>®</sup> | SuperSOT <sup>™</sup> -3               | VCX <sup>™</sup>                 |
| FRFET <sup>®</sup>                   | PDP-SPM <sup>™</sup>   | SuperSOT <sup>™</sup> -6               |                                  |
| Global Power Resource <sup>SM</sup>  | Power220 <sup>®</sup>  |  |                                  |

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