

OZ9976

FEATURES

- Offline Inverter Controller (IPB)
- Supports both fixed and variable frequency applications
- Half-bridge or push-pull topology
- Directly drives pulse transformers
- Dedicated pins for Analog and LPWM dimming
- User-defined minimum operating frequency
- User-defined striking frequency range
- Open-load, over-voltage, and under-voltage lockout protection
- User-defined striking and shutdown delay timers
- Soft start function

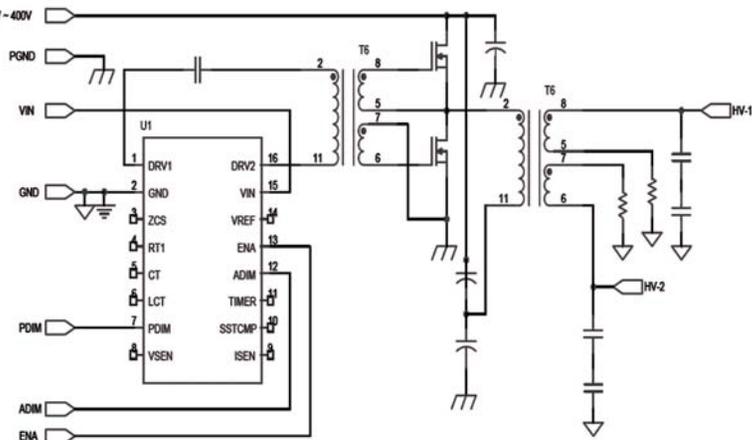
GENERAL DESCRIPTION

The OZ9976 is a high efficiency, Pulse Width Modulation (PWM) controller designed for off line LCD backlight application. It achieves high efficiency power conversion with minimal switching loss using Zero Current Switching (ZCS) technology. OZ9976 applications can operate under fixed or variable operating frequency with ZCS technology.

The minimum operating frequency can be set by either an external RC network or operate in self-oscillating mode. The intelligent operating frequency management circuitry extends Cold Cathode Fluorescent Lamp (CCFL) lifetime and offers design flexibility.

APPLICATIONS

- LCD TV



U.S. Patent #'s 6,259,615; 6,396,722; 6,570,344; 6,781,325; 6,804,129; 6,809,938; 6,856,519; 6,900,993; 6,936,975; 7,075,245; 7,120,035; 7,126,289; 7,190,123; 7,248,240; 7,345,431; 7,394,209; 7,417,382; 7,425,949; 7,515,445; 7,515,446; 7,550,928; 7,554,273; and more patents pending.

OZ9901

FEATURES

- Integrated 3A, 0.2Ω switching MOSFET
- Integrated VGH and VGL charge pump regulators
- Adjustable VGH Delay
- Operational amplifier for VCOM buffer
- Open-drain reset output for TCON
- 1.2MHz fixed switching frequency boost converter with soft start and adjustable output
- Thermal protection

GENERAL DESCRIPTION

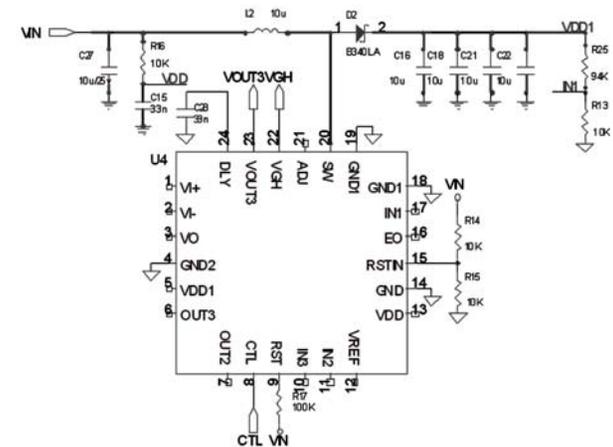
OZ9901 offers a complete power supply solution for TFT LCD panel applications. The LCD Bias Supply Controller consists of a high performance boost converter, open drain reset output, charge-pump regulators for VGH and VGL, operational amplifier, input voltage detector and a logic-controlled gate-on pulse modulator. The boost converter operates using current mode control, and offers fast line and load responses for LCD bias supplies.

The integrated charge pumps provide a regulated supply for the panel gate driver ICs. The charge-pump regulators provide a positive gate-on supply voltage (VGH) and negative gate-off supply voltage (VGL).

The operational amplifier works as a VCOM buffer and supplies a high output current, fast slew rate and wide bandwidth for driving capacitive loads.

APPLICATIONS

- Notebook/Netbook Computer



U.S. Patent #7,498,793; and more patents pending.