

## LTC7000EMSE#PBF

Data Sheet

**RFO** 

Fast 150V Protected High Side NMOS Static Switch Driver

Manufacturers Analog Devices, Inc

Package/Case 16-Lead MSOP w/ EP

Product Type Switches

**RoHS** 

Lifecycle

Please submit RFQ for LTC7000EMSE#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

## **General Description**

The LTC7000/LTC7000-1 is a fast high side N-channel MOSFET gate driver that operates from input voltages up to 135V. It contains an internal charge pump that fully enhances an external N-channel MOSFET switch, allowing it to remain on indefinitely.

Its powerful driver can easily drive large gate capacitances with very short transition times, making it well suited for both high frequency switching applications or static switch applications that require a fast turn-on and/or turn-off time.

When an internal comparator senses that the switch current has exceeded a preset level, a fault flag is asserted and the switch is turned off after a period of time set by an external timing capacitor. After a cool-down period, the LTC7000/LTC7000-1 automatically retries.

The LTC7000/LTC7000-1 is available in the thermally-enhanced 16-lead MSOP packages.

LTC7000LTC7000-1Package16-Lead MSOP MSE1616-Lead MSOP MSE16(12)High Voltage Pin Spacing0.157mm0.657mmRUN/OVLO/ISET/IMON PinsYesNo

**Features** 

Wide Operating VIN: 3.5V to 135V (150V Abs Max)

 $1\Omega$  Pull-Down,  $2.2\Omega$  Pull-Up for Fast Turn-On and Turn-Off Times with 35ns Propagation Delays

Internal Charge Pump for 100% Duty Cycle

Short-Circuit Protected

Adjustable Current Trip Threshold (LTC7000)

Current Monitor Output (LTC7000)

Automatic Restart Timer

Open-Drain Fault Flag

Adjustable Turn-On Slew Rate

Gate Driver Supply from 3.5V to 15V

Adjustable VIN Undervoltage and Overvoltage Lockouts (LTC7000)

Adjustable Driver Supply VCC Undervoltage Lockout

Low Shutdown Current: 1 µA

CMOS Compatible Input

Thermally Enhanced, High Voltage Capable 16-Lead MSOP Packages

AEC-Q100 Qualified for Automotive Applications

## **Related Products**



**LT3430IFE** 

Analog Devices, Inc TSSOP-16



**LTC3900ES8** 

Analog Devices, Inc SOP8



**LT1074HVCT7** 

Analog Devices, Inc TO-220-7



Static Switch Driver

Load and Supply Switch Driver

Electronic Valve Driver

High Frequency High Side Gate Driver



LTC3832EGN

Analog Devices, Inc SSOP-16



LT1074IT7

Analog Devices, Inc TO-220-7



**LT1158CSW** 

Analog Devices, Inc

SOP16



LTC1625IS

Analog Devices, Inc
SOP16



LTC1625CS

Analog Devices, Inc
SOIC-16