

# FAN3224CMX

Data Sheet

Dual 4A High-Speed, Low-Side Gate Driver; Package: SOIC; No of Pins: 8; Container: Tape & Reel, MOSFET & Power Driver ICs DUAL 4A HIGH-SPEED LOW-SIDE GATE

Manufacturers ON Semiconductor, LLC

Package/Case SOIC-8

Product Type Power Management ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for FAN3224CMX or Email to us: sales@ovaga.com We will contact you in 12 hours.



### **General Description**

The FAN3223-25 family of dual 4A gate drivers is designed to drive N-channel enhancement-mode MOSFETs in low-side switching applications by providing high peak current pulses during the short switching intervals. The driver is available with either TTL or CMOS input thresholds. Internal circuitry provides an under-voltage lockout function by holding the output LOW until the supply voltage is within the operating range. In addition, the drivers feature matched internal propagation delays between A and B channels for applications requiring dual gate drives with critical timing, such as synchronous rectifiers. This also enables connecting two drivers in parallel to effectively double the current capability driving a single MOSFETS. The FAN322X drivers incorporate MillerDrive<sup>TM</sup> architecture for the final output stage. This bipolar-MOSFET combination provides high current during the Miller plateau stage of the MOSFET turn-on / turn-off process to minimize switching loss, while providing rail-to-rail voltage swing and reverse current capability. The FAN3223 offers two inverting drivers and the FAN3224 offers two non-inverting drivers. Each device has dual independent enable pins that default to ON if not connected. In the FAN3225, each channel has dual inputs of opposite polarity, which allows configuration as non-inverting or inverting with an optional enable function using the second input. If one or both inputs are left unconnected, internal resistors bias the inputs such that the output is pulled LOW to hold the power MOSFET OFF.

# **Features** Application

Industry-Standard Pinouts ONSEMI

4.5 to 18V Operating Range

5A Peak Sink/Source at>

4.3A Sink / 2.8A Source at>

Choice of TTL or CMOS Input Thresholds

Three Versions of Dual Independent Drivers:

Dual Inverting + Enable (FAN3223)

Dual Non-Inverting + Enable (FAN3224)

Dual-Inputs(FAN3225)

Internal Resistors Turn Driver Off If No Inputs

MillerDrive<sup>TM</sup> Technology

12ns / 9ns Typical Rise/Fall Times with 2.2nF Load

Typical Propagation Delay Under 20ns Matched within 1ns to the Other Channel

Double Current Capability by Paralleling Channels

Rated from -40°C to +125°C Ambient

8-Lead 3x3mm MLP or 8-Lead SOIC Package

#### **Related Products**



FAN3122TMX

ON Semiconductor, LLC SOIC-8



FAN7930BMX

ON Semiconductor, LLC SOP-8



**FAN73912MX** 

ON Semiconductor, LLC SOIC-16



FAN7602CMX

ON Semiconductor, LLC





FAN7621BSJX

ON Semiconductor, LLC

SOP-16



FAN3223TMX

ON Semiconductor, LLC

SOIC-8



FAN7361MX

ON Semiconductor, LLC

SOP-8



#### FAN48630UC50X

ON Semiconductor, LLC WLCSP-16