

Half-Bridge Gate Drivers (LF2103, LF2104, LF2304, LF2184, LF21844)

Problem/Solution

High voltage, high speed half-bridge gate drivers are efficiently driving two N-Channel MOSFETs or IGBTs. The floating high-side switch is operated in bootstrap configuration up to $600V_{DC}$.

The logic inputs are compatible to standard TTL and CMOS levels down to 3.3 V. The gate drivers convert the controller's PWM signals into gate-signals compatible to MOSFETs or IGBTs, providing a robust and reliable power semiconductor control.

Benefits

- Driven from a single power supply
- Can be combined with a wide range of power devices
- Simplified start-up and protection schemes
- Shoot-Through Protection by hardware
- More precise control and lower torque ripple

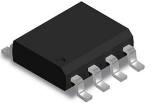
Features

- Floating high-side driver in bootstrap operation to $600V$
- 600 mA/290 mA and 2300 mA/1900 mA sink/source output capability
- Undervoltage Lockout and Overcurrent Protection
- Internal deadtime generation
- Matched propagation delay for all channels

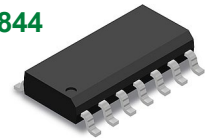
Markets/Applications

- Motor controls/drives
- Stepper motor drives
- DC/DC converters
- AC/DC inverters
- Robotics
- Cordless power tools
- Drones

LF2103
LF2104
LF2304
LF2184



LF21844



Technical resources (Click on below icons to learn more)



Series Page



LF2103
Datasheet



LF2104
Datasheet



LF2304
Datasheet



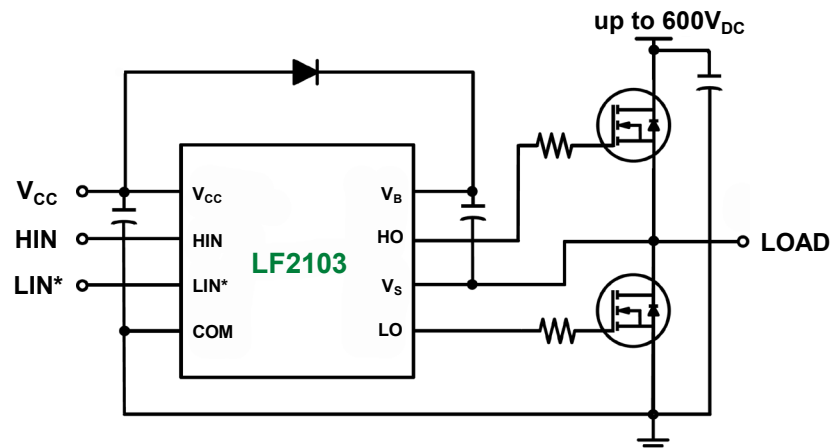
LF2184
Datasheet



LF21844
Datasheet



Cross
Reference



R2111