Product Overview

NCP5181: MOSFET / IGBT Drivers, High Voltage, High and Low Side, Dual Input

For complete documentation, see the data sheet.

The NCP5181 is a High Voltage Power Mosfet Driver providing two outputs for direct drive of a 2 N-channel power Mosfets arranged in a half-bridge (or any other high side + low side configuration).It uses the bootstrap technique to insure a proper drive of the High side power switch. The driver works with 2 independent inputs to accomodate any topology (including half-bridge, asymmetrical half-bridge, active clamp and full bridge).

Features

- High Voltage Range: up to 600 V
- dV/dt Immunity 50 V/nsec
- Gate Drive Supply Range from 10 V to 20 V
- High and Low DRV Outputs
- Output Source / Sink Current Capability 1.1 A / 2.4 A
- 3.3 V and 5 V Input Logic Compatible
- Up to Vcc Swing on Input Pins
- Matched Propagation Delays between Both Channels
- Outputs in Phase with the Inputs
- Independent Logic Inputs to Accommodate All Topologies

For more features, see the data sheet

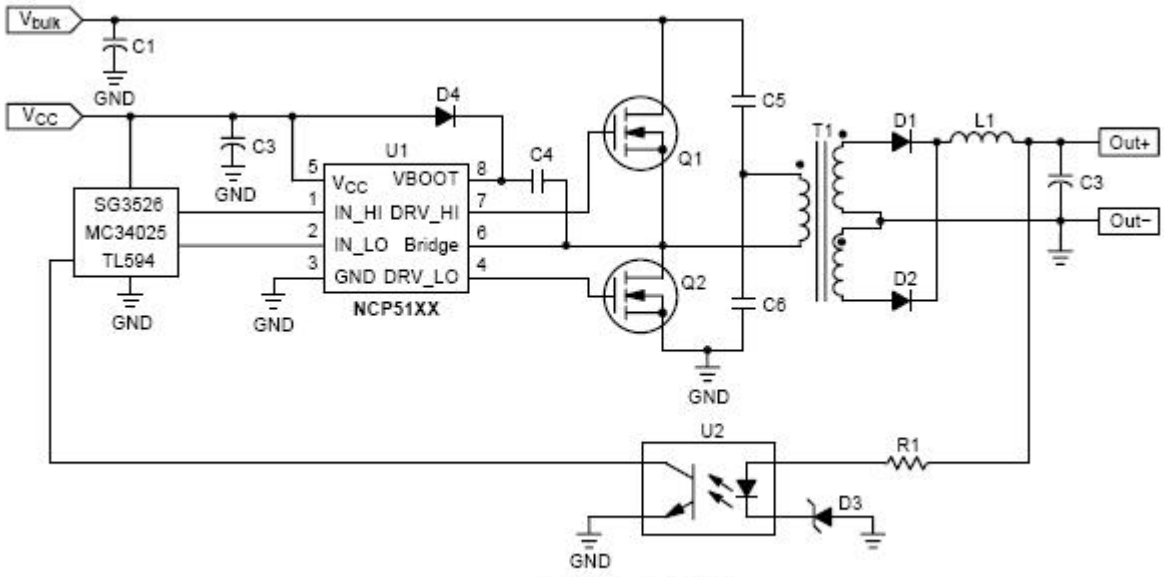
Applications

- Bridge Inverter for UPS systems
- High Power Energy Management
- Half-bridge Power Converters
- Full-bridge Converters
- Any Complementary Drive Converters (asymmetrical halfbridge, active clamp)

Part Electrical Specifications

Product	Compliance	Status	Type	Number of Drivers	V_{in} Max (V)	V_{CC} Max (V)	Drive Source/Sink Typ (mA)	Rise Time (ns)	Fall Time (ns)	t_p Max (ns)	Package Type
NCP5181DR2G	Pb-free Halide free	Active	MOSFET	2	600	20	1400 / 2200	40	40	170	SOIC-8
NCP5181PG	Pb-free Halide free	Active	MOSFET	2	600	20	1400 / 2200	20	20	170	PDIP-8

Application Diagram



Typical Application

For more information please contact your local sales support at www.onsemi.com.

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