

## Product Overview

### NCP5304: MOSFET / IGBT Drivers, High Voltage, High and Low Side, Dual Input

For complete documentation, see the data sheet.

The NCP5304 is a High Voltage Power gate Driver providing two outputs for direct drive of 2 N-channel power MOSFETs or IGBTs arranged in a half-bridge configuration. It uses the bootstrap technique to insure a proper drive of the High-side power switch. The driver works with 2 independent inputs with cross conduction protection.

#### Features

- High Voltage Range: Up to 600V
  - dV/dt Immunity  $\pm 50$  V/ns
  - Gate Drive Supply Range from 10 V to 20 V
  - High and Low Drive Outputs
  - Output Source / Sink Current Capability 250 mA / 500 mA
  - 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
  - Cross Conduction Protection with 100ns Internal Fixed Dead Time
- For more features, see the data sheet

#### Applications

- Half Bridge Power Converters
- Full Bridge Converters

#### Part Electrical Specifications

Product	Compliance	Status	Type	Number of Drivers	V <sub>in</sub> Max (V)	V <sub>CC</sub> Max (V)	Drive Source/Sink Typ (mA)	Rise Time (ns)	Fall Time (ns)	t <sub>p</sub> Max (ns)	Package Type
NCP5304DR2G	Pb-free Halide free	Active	MOSFET or IGBT	2	600	23	250 / 500	85	35	170	SOIC-8

# Application Diagram

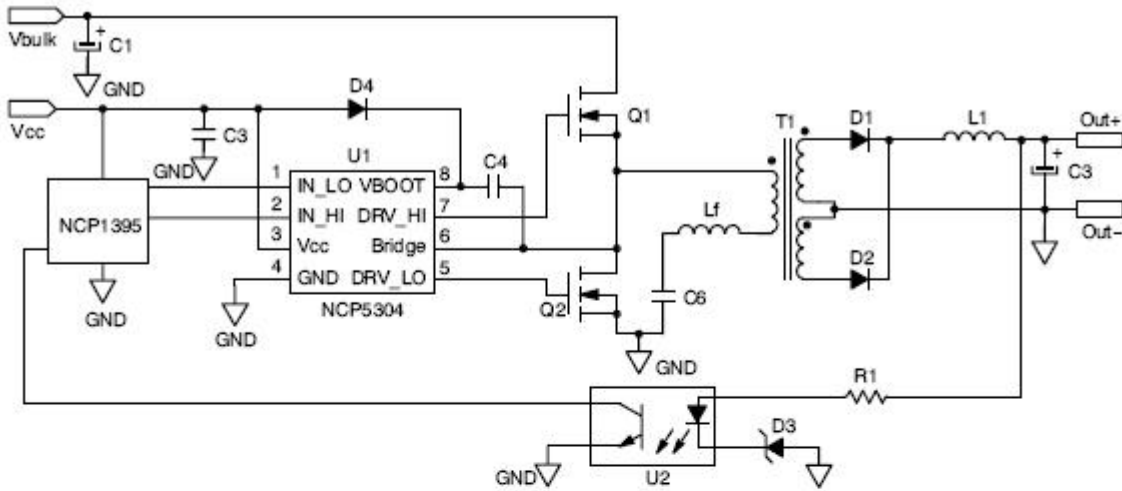


Figure 1. Typical Application Resonant Converter (LLC type)

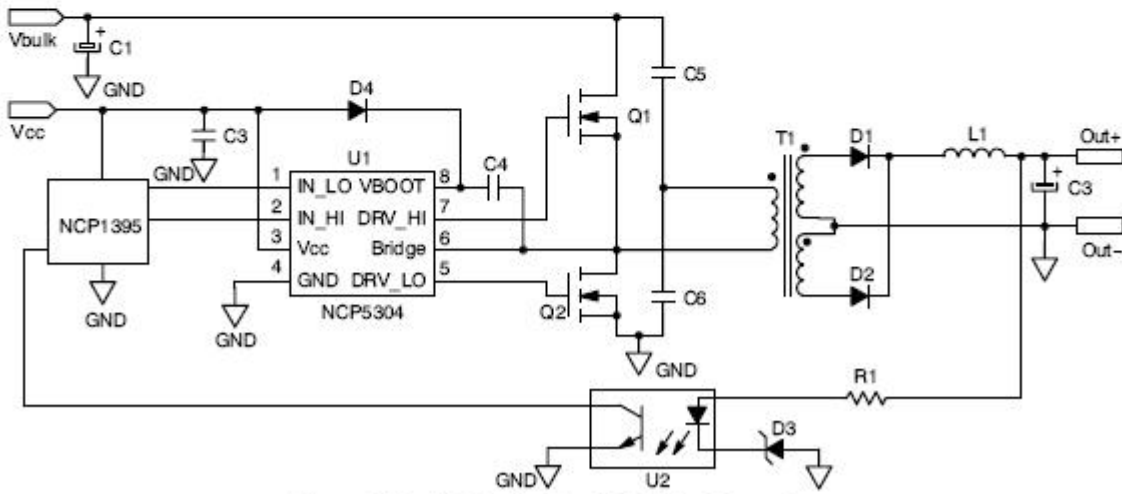


Figure 2. Typical Application Half Bridge Converter

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 9/20/2019