

Product Overview

NCP5106: MOSFET / IGBT Drivers, High Voltage, High and Low Side

For complete documentation, see the data sheet.

The NCP5106 is a High Voltage gate Driver IC providing two outputs for direct drive of 2 N-channel power MOSFETs or IGBTs arranged in a half-bridge configuration version B or any other high-side + low-side configuration version A. It uses the bootstrap technique to insure a proper drive of the High-side power switch. The driver works with 2 independent inputs. NCP5109 = 200V NCP5106 = 600V

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 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
- Independent Logic Inputs to Accommodate All Topologies (Version A)

For more features, see the data sheet

Applications

- Half-Bridge Power Converters
- Any Complementary Drive Converters (Asymmetrical Half-Bridge, Active Clamp) (A version only).
- Full-Bridge Converters

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	V _{in} Max (V)	V _{cc} Max (V)	Drive Source / Sink Typ (mA)	Rise Time (ns)	Fall Time (ns)	t _o Max (ns)	Package Type
NCP5106ADR2G	0.4267	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	600	23	250 / 500	85	35	170	SOIC-8
NCP5106AMNTWG	0.4533	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	600	23	250 / 500	85	35	170	DFN-10
NCP5106BDR2G	0.4267	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	600	23	250 / 500	85	35	170	SOIC-8
NCP5106BMNTWG	0.4533	Pb-free Halide free	Active	MOSFET / IGBT	2	High-Low	Junction Isolation	600	23	250 / 500	85	35	170	DFN-10

Application Diagram

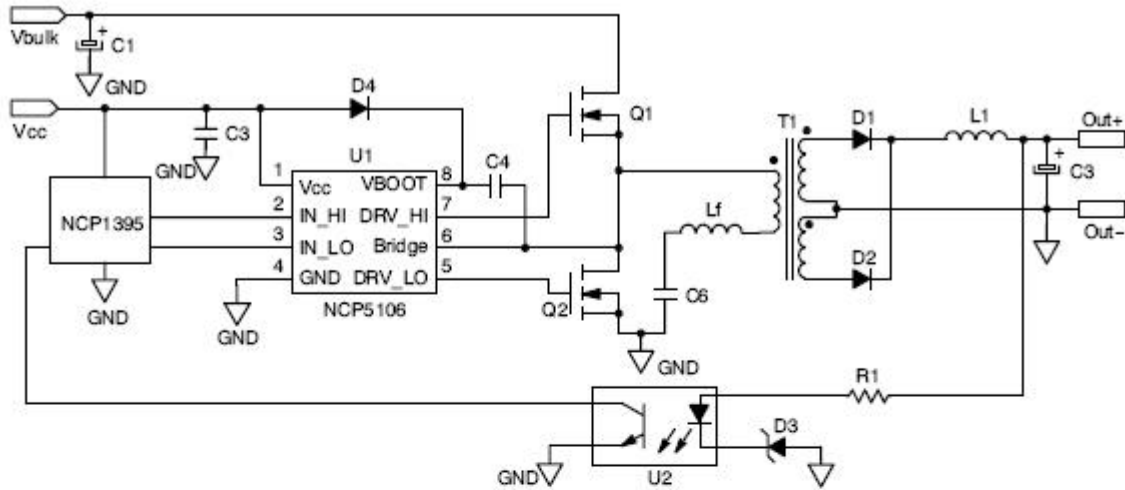


Figure 1. Typical Application Resonant Converter (LLC type)

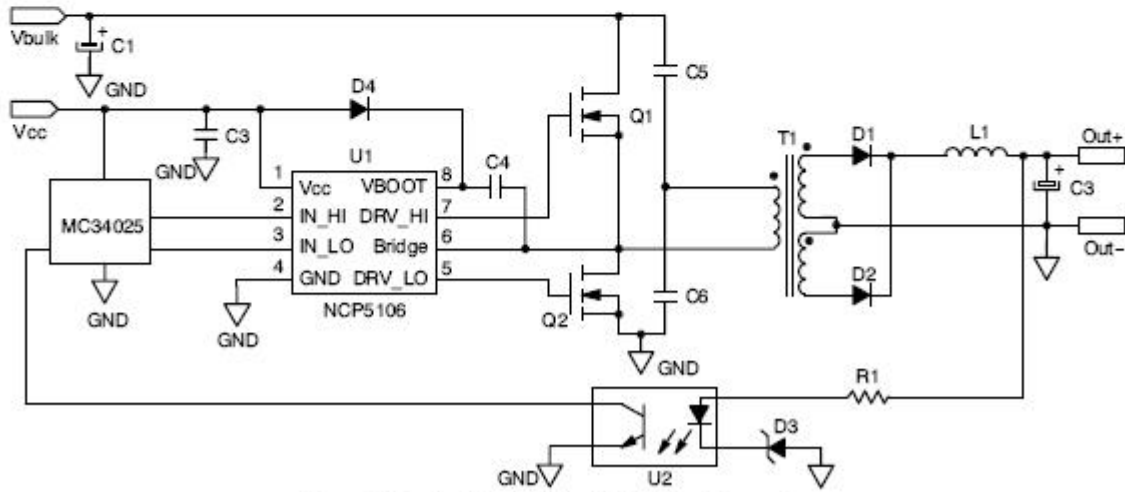


Figure 2. Typical Application Half Bridge Converter

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

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