

## Product Overview

### NCP5104: Single Input High and Low Side Power MOSFET Driver

For complete documentation, see the data sheet.

The NCP5104 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.

#### 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
- Under Vcc LockOut (UVLO) for both channels
- Pin to pin compatible with Industry standard
- Matched propagation delays between both channels

For more features, see the data sheet

#### Benefits

- Rugged and flexible design
- Robust design
- Wide supply range
- Suitable for half bridge converter topology
- Suitable for low to mid power applications
- Low level input for micro-controller operation
- Flexible input level up to Vcc
- Robust design
- Reduced design efforts

#### Applications

- Half bridge power converter: low to mid power

#### End Products

- Lighting ballast
- White goods
- Motor Control

#### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Power Switch	Number of Outputs	Topology	Isolation Type	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>o</sub> Max (ns)	Package Type
NCP5104DR2G	0.4267	Pb-free Halide free non AEC-Q and PPAP	Active	MOSFET / IGBT	2	Half-Bridge	Junction Isolation	600	20	250 / 500	85	35	170	SOIC-8
NCV5104DR2G	1.0466	AEC Qualified PPAP Capable Pb-free Halide free	Active	MOSFET / IGBT	2	Half-Bridge	Junction Isolation	600	20	250 / 500	85	35	170	SOIC-8

## Application Diagram

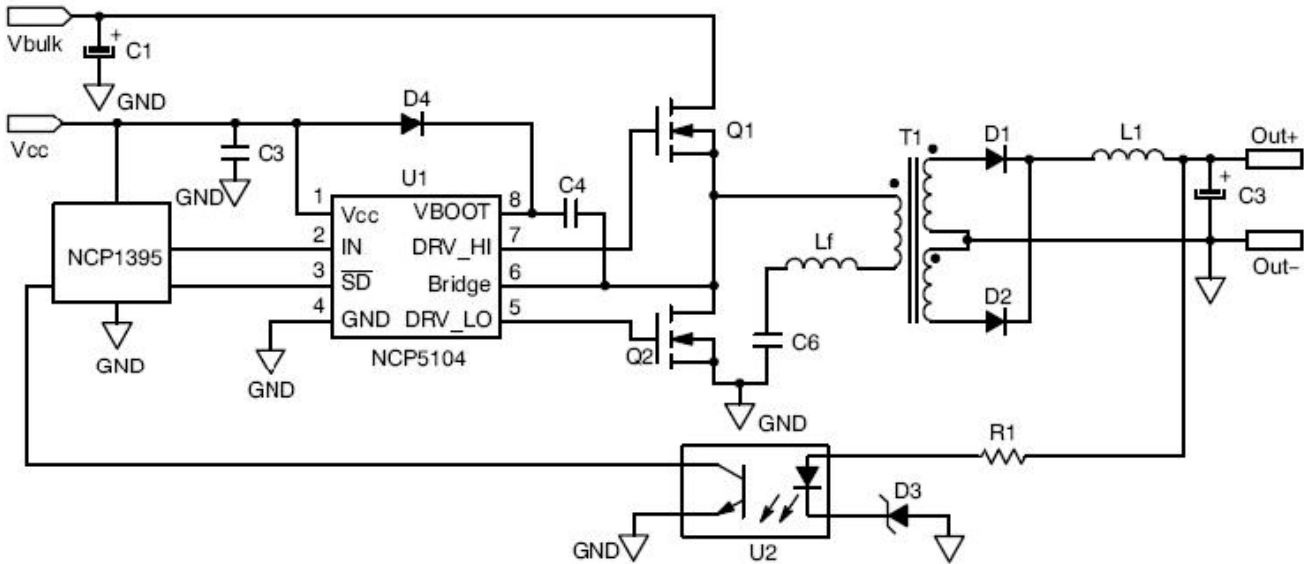


Figure 1. Typical Application Resonant Converter (LLC type)

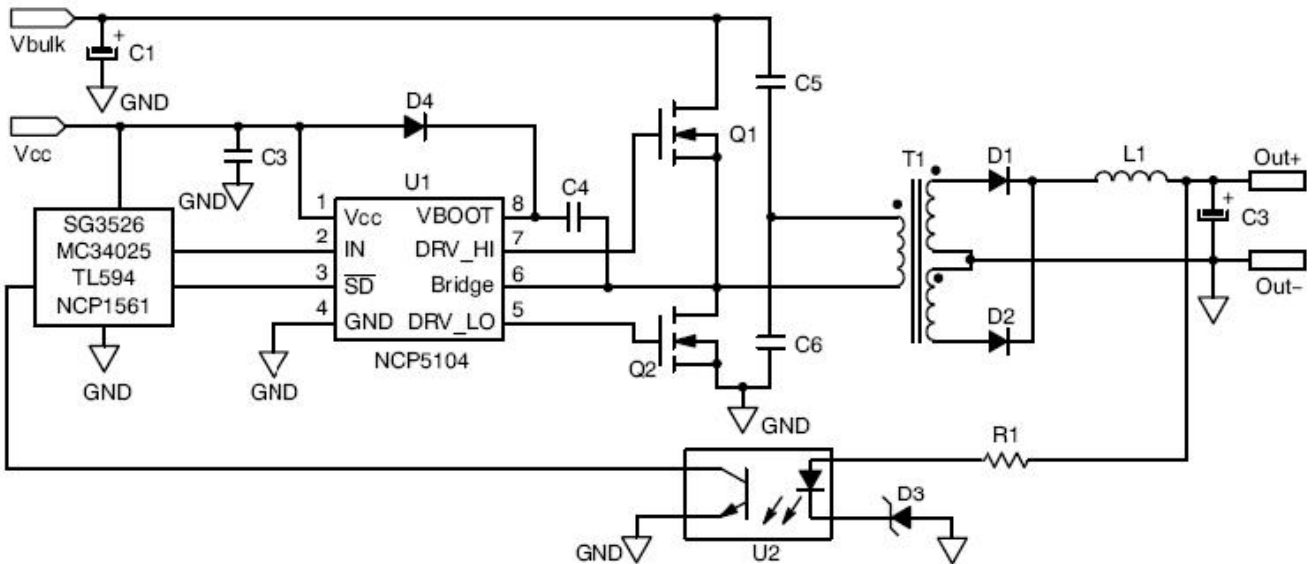


Figure 2. Typical Application Half Bridge Converter

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Created on: 1/27/2021