

## 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)	Rise Time (ns)	Fall Time (ns)	Drive Source Current Typ (A)	Drive Sink Current Typ (A)	Turn On Prop. Delay Typ (ns)	Turn Off Prop. Delay Typ (ns)	Delay Matching	Package Type
NCP5104DR2G	0.32	Pb-free Halide free non AEC-Q and PPAP	Active	MOS FET / IGBT	2	Half-Bridge	Junction Isolation	600	20	85	35	0.25	0.5	620	100	45	SOIC-8
NCV5104DR2G	0.785	AEC Qualified PPAP Capable Pb-free Halide free	Active	MOS FET / IGBT	2	Half-Bridge	Junction Isolation	600	20	85	35	0.25	0.5	620	100	45	SOIC-8

## Application Diagram

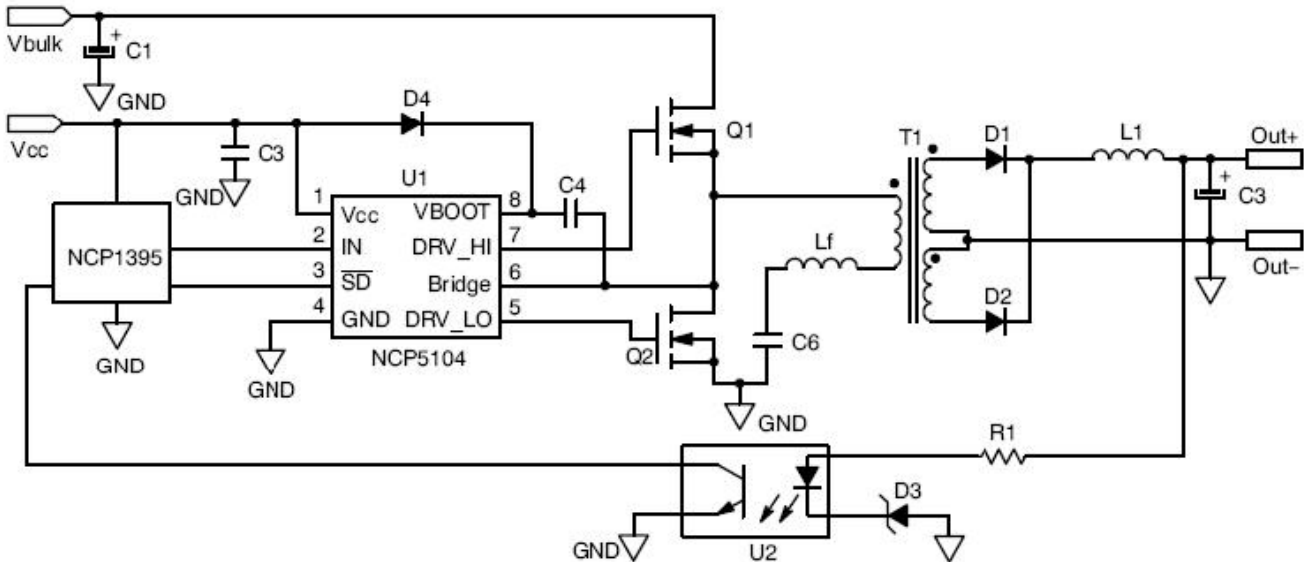


Figure 1. Typical Application Resonant Converter (LLC type)

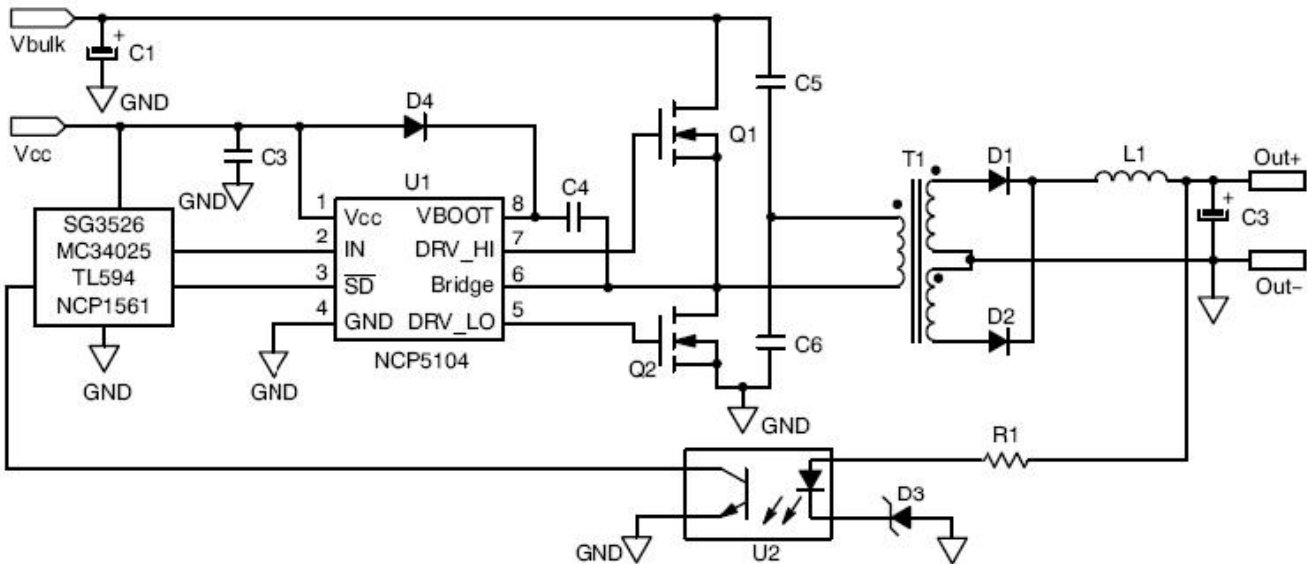


Figure 2. Typical Application Half Bridge Converter

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