

Product Overview

NCP81178: Secondary Synchronous Rectifier Driver for Forward Converters

For complete documentation, see the data sheet.

The NCP81178 is a secondary-side synchronous rectifier driver designed for isolated power converters, especially actively clamped forward or flyback, and asymmetric half bridge converters. The NCP81178 drives two N-channel MOSFETs on the secondary side in a complementary manner. It accepts a PWM signal that can be derived from the secondary winding or an auxiliary winding on the main power transformer. It can also take a PWM from the primary side controller through a pulse transformer or other isolator.

Features

- N-channel synchronous rectifier MOSFET driver
- Primary shutdown detection
- Internally generated PWM threshold voltage with external programmability
- 4.5A/3.8A sink and 3A source capability
- 3mm by 3mm DFN package

Benefits

- Drives N-channel MOSFETs to improve efficiency for high power isolated solution
- Protection against overvoltage
- Design flexibility
- Strong drivers allows fast turn on/off characteristics
- Small size reduces board space

Applications

- Isolated DC/DC power
- servers silver box supplies
- 48V server, telecom and datacom

End Products

- servers
- datacom
- isolated bricks

Part Electrical Specifications

Product	Compliance	Status	V _{CC} Max (V)	V _{ref} Typ (V)	I _{CC} Max (A)	T _A Min (°C)	T _A Max (°C)	Package Type
NCP81178MNTXG	Pb-free Halide free	Active	14	1.25		-40	125	DFN-10

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

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