

# NCV1362

## Automotive Primary Side PWM Controller for Low Power Offline SMPS

### Product Overview

For complete documentation, see the data sheet.

The NCV1362 is a new quasi-resonant peak current mode control mode controller targeting output power levels from a few watts up to 50 W in a flyback application. It is primary side regulated for Constant Voltage and Constant Current regulation, achieving excellent line and load regulation without requiring the typical opto-coupler and voltage reference.

#### Features

- Quasi-Resonant with Valley Switching Operation
- Maximum Frequency Clamp (No Clamp, 80, 110 and 140 kHz)
- Frequency Jittering
- LFF and BO Feature on a Dedicated Pin
- Dual Frozen Peak Current
- Constant Voltage Primary-Side Regulation <  $\pm 5\%$
- Constant Current Primary-Side Regulation <  $\pm 5\%$
- AEC-Qualified

#### Benefits

- High Efficiency Operation
- Flexible Design Options
- Improved EMI Signature
- Enables Robust Designs
- Optimize Light Load Efficiency and Stand-by Performance

#### Applications

- HEV & EV Vehicles

#### End Products

- OBC & Traction Inverters Auxiliary Power
- HV to LV DC/DC Converters Auxiliary Power

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	f <sub>sw</sub> Typ (kHz)	Stand-by Mode	UVLO (V)	Short Circuit Protection	Latch	Soft Start	V <sub>CC</sub> Max (V)	Drive Cap. (mA)	Package Type
NCV1362AADR2G	0.575		NEW	Flyback	Current Mode	No Frequency clamp	Yes	Yes	Yes	Yes	Yes	28 V	300 / 500	SOIC-8
NCV1362ABDR2G	0.575		NEW	Flyback	Current Mode	110 kHz Frequency clamp	Yes	Yes	Yes	Yes	Yes	28 V	300 / 500	SOIC-8
NCV1362ACDR2G	0.575		NEW	Flyback	Current Mode	No Frequency clamp	Yes	Yes	Yes	Yes	Yes	28 V	300 / 500	SOIC-8