

## Product Overview

### NCP1219: PWM Controller with Adjustable Skip Level and External Latch Input

For complete documentation, see the data sheet.

The NCP1219 represents a new, pin to pin compatible, generation of the successful 7-pin current mode NCP12XX product series. The controller allows for excellent standby power consumption by use of its adjustable skip mode and integrated high voltage startup FET. Internal frequency jittering, ramp compensation, timer-based fault detection and a latch input make this controller an excellent candidate for converters where ruggedness and component cost are the key constraints. The Dynamic Self Supply (DSS) drastically simplifies the transformer design in avoiding the use of an auxiliary winding to supply the NCP1219. This feature is particularly useful in applications where the output voltage varies during operation (e.g. battery chargers). Due to its high voltage technology, the IC can be directly connected to the high voltage dc rail.

#### Features

- Cycle Skip Mode
  - Internal High Voltage Startup Circuit
  - Latch Input for Easy Implementation of Overvoltage and Overtemperature Protection
  - Fixed-Frequency Current-Mode Operation with Ramp Compensation (65 kHz and 100 kHz Options)
  - Dynamic Self Supply Eliminates the Need for an Auxiliary Winding
  - Timer-Based Fault Protection for Improved Overload Detection
  - Latch and Auto-Recovery Overload Protection Options
  - Accurate Current Limit Detector ( $\pm 5\%$ )
  - Adjustable Skip Level
  - Frequency Modulation for Softened EMI Signature
- For more features, see the data sheet

#### Benefits

- Improved efficiency at light loads and standby conditions
- Clean and loss less start-up sequence and reduces component count
- Design versatility

#### Applications

- AC-DC Adapters
- Consumer Electronic Power Supplies

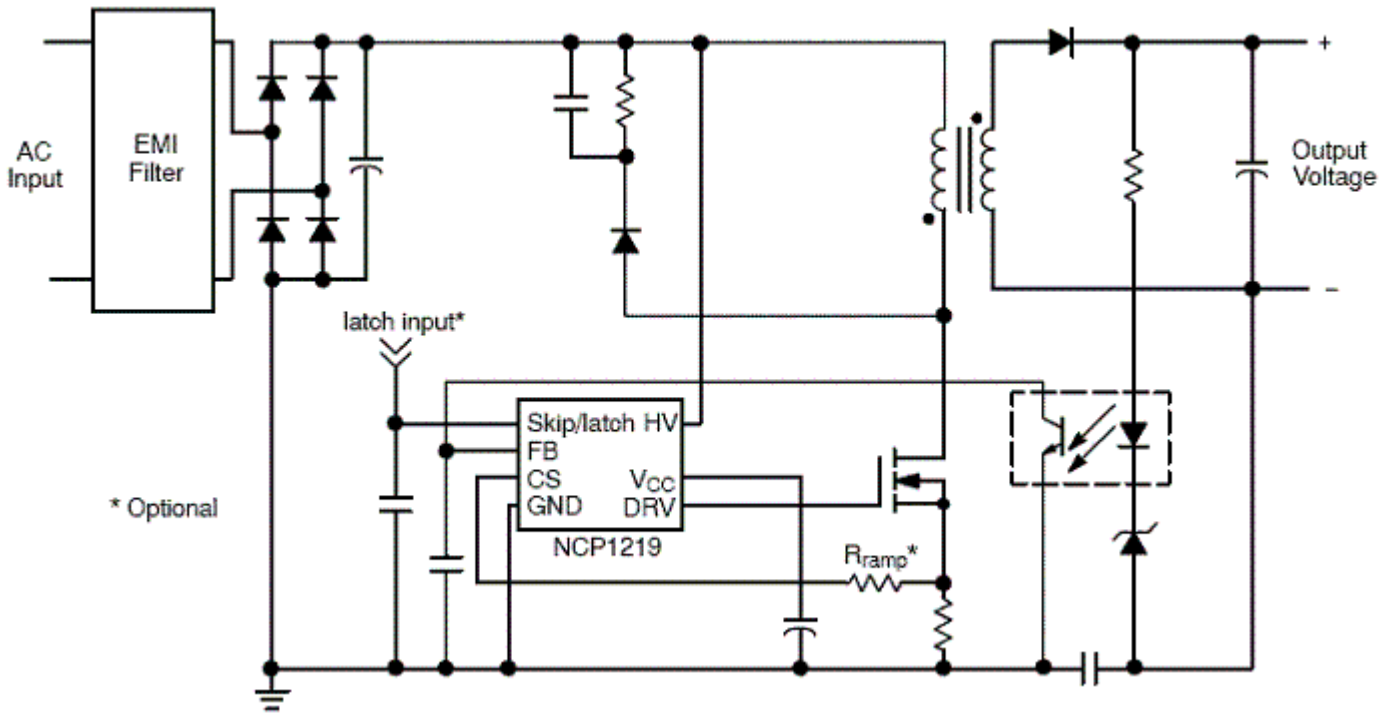
#### End Products

- Offline Battery Chargers
- STB, DVD, DVDR
- Notebooks
- LCD Monitors
- Printers

#### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	$f_{sw}$ Typ (kHz)	Stand-by Mode	UVLO (V)	Short Circuit Protection	Latch	Soft Start	$V_{CC}$ Max (V)	Drive Cap. (mA)	Package Type
NCP1219AD100R2G	0.56	Pb-free Halide free non AEC-Q and PPAP	Active	Flyback	Current Mode	100	Yes	9.4	Yes	Yes	Yes	20	500 / 800	SOIC-7
NCP1219AD65R2G	0.56	Pb-free Halide free non AEC-Q and PPAP	Active	Flyback	Current Mode	65	Yes	9.4	Yes	Yes	Yes	20	500 / 800	SOIC-7
NCP1219BD65R2G	0.56	Pb-free Halide free non AEC-Q and PPAP	Active	Flyback	Current Mode	65	Yes	9.4	Yes	Yes	Yes	20	500 / 800	SOIC-7

# Application Diagram



For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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