

## Product Overview

### NCV33163: Buck / Boost / Inverting Converter, Switching Regulator, 2.5 A

For complete documentation, see the data sheet.

The NCV33163 series are monolithic power Buck Boost Inverting Switching Regulators that contain the primary functions required for dc-to-dc converters. This series is specifically designed to be incorporated in step-up (boost), step-down (buck) and voltage-inverting applications with a minimum number of external components. These devices consist of two high gain voltage feedback comparators, temperature compensated reference, controlled duty cycle oscillator, driver with bootstrap capability for increased efficiency, and a high current output switch. Protective features consist of cycle-by-cycle current limiting, and internal thermal shutdown. Also included is a low voltage indicator output designed to interface with microprocessor based systems. These Buck Boost Inverting Switching Regulators are contained in a 16 pin dual-in-line heat tab plastic package for improved thermal conduction.

### Features

- Output Switch Current in Excess of 2.0A
- Operation from 2.5V to 60V Input
- Low Standby Current
- Precision 2% Reference
- Controlled Duty Cycle Oscillator
- Driver with Bootstrap Capability for Increased Efficiency
- Cycle-by-Cycle Current Limiting
- Internal Thermal Shutdown Protection
- Low Voltage Indicator Output for Direct Microprocessor Interface
- Heat Tab Power Package

For more features, see the data sheet

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	V <sub>O</sub> Typ (V)	I <sub>O</sub> Typ (A)	Efficiency (%)	f <sub>sw</sub> Typ (kHz)	Package Type
NCV33163DWR2G	1.7866	AEC Qualified PPAP Capable Pb-free Halide free	Active	Step-Up/Step-Down	Voltage Mode	2.5	60	1.25 to 40	3.4	80	Up to 250	SOIC-16W

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Created on: 3/29/2020