

Product Overview

NCV6336BM: Synchronous Buck Converter, Processor Supply, I2C Programming, Transient Load Helper, 5.0 A

For complete documentation, see the data sheet.

The NCV6336B is a synchronous buck converter optimized to supply recent micro processors (ARM core processor, GPU) that demand high power at low voltages of portable applications powered by one cell Li-ion or three cell Alkaline/NiCd/NiMH batteries. The device is able to deliver up to 5.0 A, with programmable output voltage from 0.6 V to 1.4 V. It can share the same output rail with another DCDC and works as a transient load helper. Operation at a 2.74 MHz switching frequency allows the use of small components. Synchronous rectification and automatic PWM/PFM transitions improve overall solution efficiency. The NCV6336B is in a space saving, low profile 2.0 x 1.6 mm CSP 20 package.

Features

- 2.3 V to 5.5 V Input Voltage Range
- 2.4 MHz Switching Frequency
- DVS support through I2C and VSEL pin
- Enabling with pins or I2C

Benefits

- Support Latest Battery
- Reduced output inductor and capacitor size
- Optimizes processor power
- Flexible enabling and disabling

Applications

- Battery powered applications
- Power supply for processor with low core voltage
- Power supply for memory (LPDDR3 and LPDDR4)

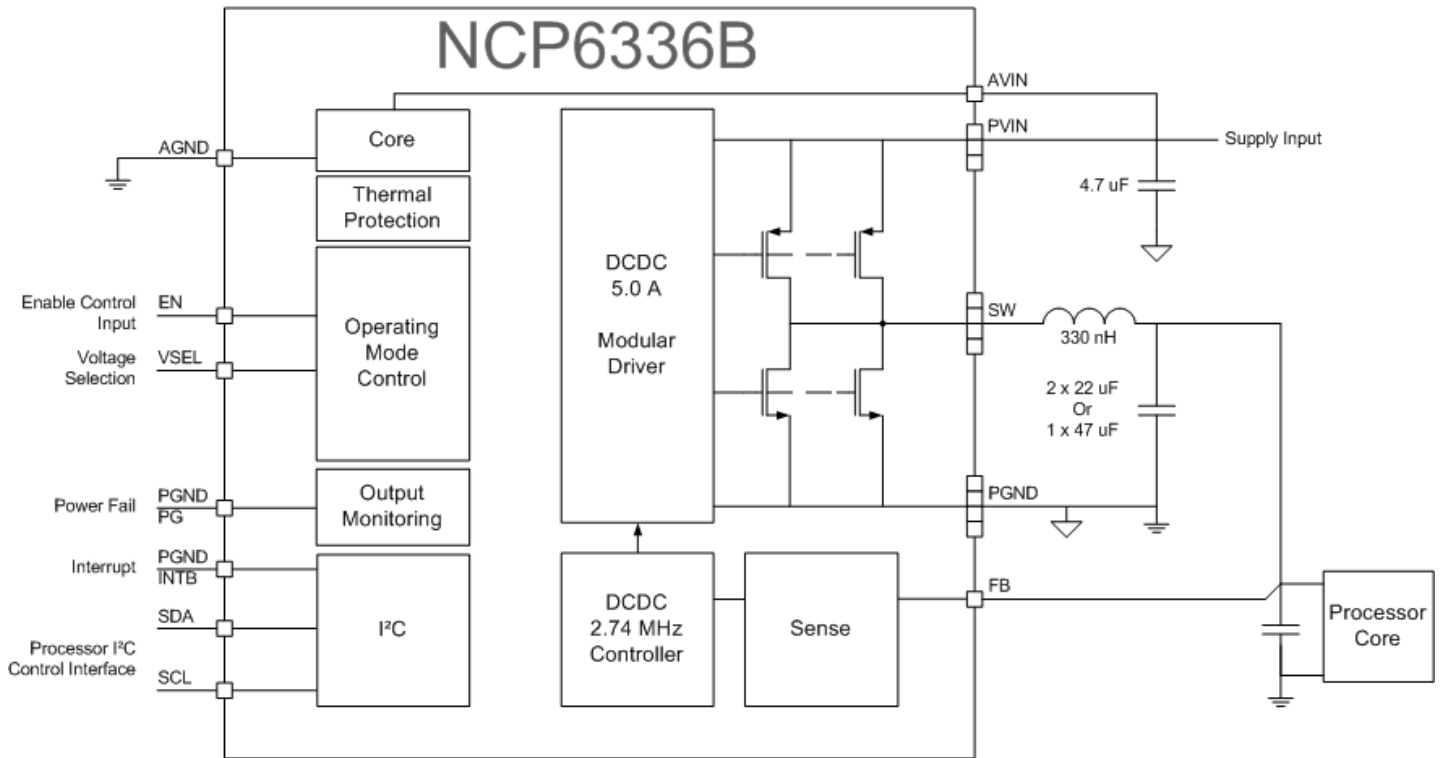
End Products

- Cellular Phones
- Tablets
- Smart Phones
- Infotainment

Part Electrical Specifications

Product	Compliance	Status	Topology	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	V _O Typ (V)	I _O Typ (A)	Efficiency (%)	f _{sw} Typ (kHz)	Package Type
NCV6336BMFCCT1G	AEC Qualified	Active	Step-Down	Voltage Mode	2.3	5.5	1.2	5	93	2740	WLCSP-20
	PPAP Capable										
	Pb-free										
	Halide free										
NCV6336CFCCT1G	AEC Qualified	Active	Step-Down	Voltage Mode	2.3	5.5	1.15	5	93	2740	WLCSP-20
	PPAP Capable										
	Pb-free										
	Halide free										

Application Diagram



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

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