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NCP1400AV33EVB:NCP1400A 3.3 V/100 mA DC - DC Converter Evaluation Board

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Evaluation Board Description

The NCP1400A series are micropower step-up DC to DC converters that are specifically designed for powering portable equipment from one or two cell battery packs. These devices are designed to start up with a cell voltage of 0.8 V and operate down to less than 0.2 V. With only four external components, this series allows a simple means to implement highly efficient converters that are capable of up to 100 mA of output current.



Each device consists of an on-chip fixed frequency oscillator, pulse width modulation controller, phase compensated error amplifier that ensures converter stability with discontinuous mode operation, soft-start, voltage reference, driver, and power MOSFET switch with current limit protection. Additionally, a chip enable feature is provided to power down the converter for extended battery life.

The NCP1400A device series are available in the TSOP package with six standard regulated output voltages. Additional voltages that range from 1.8 V to 4.9 V in 100 mV steps can be manufactured.

Features and Applications

Features

- ? Extremely Low StartUp Voltage of 0.8 V
- ? Operation Down to Less than 0.2 V
- ? Only Four External Components for Simple Highly Efficient Converters
- ? Up to 100 mA Output Current Capability
- ? Fixed Frequency Pulse Width Modulation Operation
- ? Phase Compensated Error Amplifier for Stable Converter Operation
- ? Chip Enable Power Down Capability for Extended Battery Life

Evaluation Board Information

Evaluation Board	Short Description	Status	Parts Used	Action
NCP1400AV33EVB	NCP1400A 3.3 V/100 mA DC -DC Converter Evaluation Board	Active	NCP1400ASN33T1	Contact Local Sales Office

Technical Documents

Type	Document Title	Document ID/Size	Rev
Eval Board: BOM	NCP1400AV33EVB BILL OF MATERIALS	NCP1400AV33EVB_BOM.PDF - 22.0 KB	2
Eval Board: Gerber	NCP1400AV33EVB GERBER LAYOUT FILES (ZIP FORMAT)	NCP1400AV33EVB_GERBER.ZIP - 479.0 KB	2
Eval Board: Schematic	NCP1400AV33EVB SCHEMATIC	NCP1400AV33EVB_SCHEMATIC.PDF - 22.0 KB	2
Eval Board: Test Procedure	NCP1400AV33EVB TEST PROCEDURE	NCP1400AV33EVB_TEST_PROCEDURE.PDF - 87.0 KB	2