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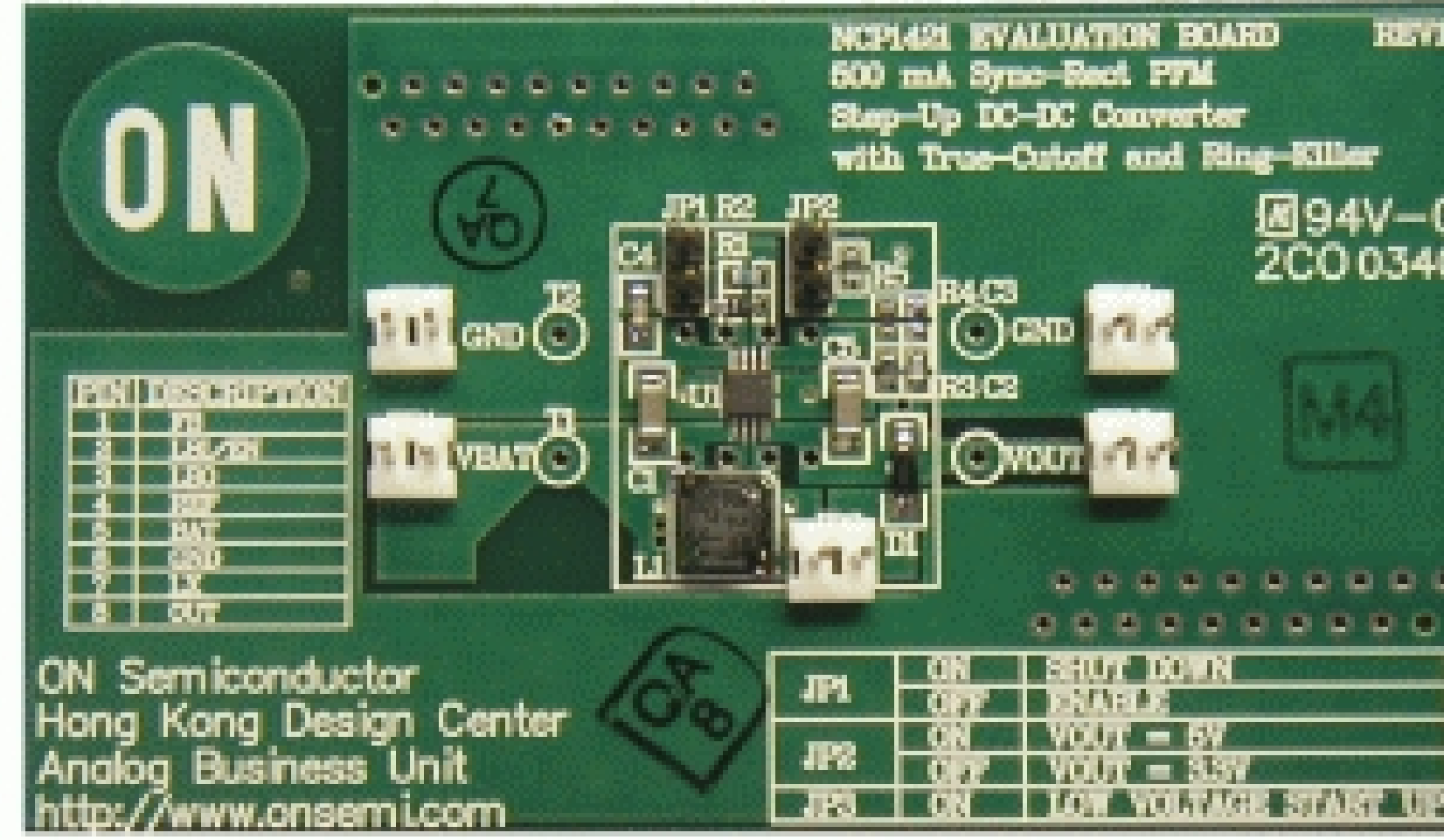
## NCP1421EVB:NCP1421 Up to 600 mA DC - DC Converter Evaluation Board

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### Evaluation Board Description

NCP1421 is a monolithic, micro - power, high - frequency, step -up switching converter IC designed for battery operated hand -held electronic products with up to 600 mA loading. It integrates a synchronous rectifier (Sync -Rect) to improve efficiency and to eliminate the external Schottky Diode. The NCP1421's high switching frequency (up to 1.2 MHz) allows for a low profile, small sized inductor and output capacitor to be used. When the device is disabled, the internal conduction path from the battery to the load is fully blocked, which isolates the load from the battery. This True -Cutoff function reduces the shutdown current to typically only 50nA. A Ring - Killer is also integrated to eliminate high -frequency ringing in discontinuous conduction mode. Finally, a Low -Battery Detector, Logic -Controlled Shutdown, Cycle -by Cycle Current Limiting and Thermal Shutdown provide value -added features for various battery operated applications. With all these functions ON, the quiescent supply current is typically only 8.5 μ A. This device is available in the compact and low profile Micro8 package.



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### Features and Applications

#### Features

- ? High Efficiency:
  - 94% for 3.3 V Output at 200 mA from 2.0 V Input
  - 84% for 3.3 V Output at 500 mA from 2.5 V Input
- ? High Switching Frequency, up to 1.2 MHz (Not Hitting Current Limit)
- ? True -Cutoff Function Reduces Device Shutdown Current to typically 50nA
- ? Anti -Ringing Ring -Killer for Discontinuous Conduction Mode

### Evaluation Board Information

Evaluation Board	Status	Pb-free	Short Description	Parts Used	Action
NCP1421EVB	Active		NCP1421 Up to 600 mA DC -DC Converter Evaluation Board	NCP1421DMR2	Contact Local Sales Office

### Technical Documents

Type	Document Title	Document ID/Size	Rev
Eval Board: BOM	NCP1421EVB BILL OF MATERIALS	NCP1421EVB_BOM.REV1.PDF - 70.0 KB	1
Eval Board: Gerber	NCP1421EVB GERBER LAYOUT FILES (ZIP FORMAT)	NCP1421EVB_GERBER.REV1.ZIP - 180.0 KB	1
Eval Board: Schematic	NCP1421EVB SCHEMATIC	NCP1421EVB_SCHEMATIC.REV1.PDF - 126.0 KB	1
Eval Board: Test Procedure	NCP1421EVB TEST PROCEDURE	NCP1421EVB_TEST_PROCEDURE.REV1.PDF - 115.0 KB	1