

LDO Regulator and Internal-Switch Buck Regulator with Adjustable Switching Frequency

Features

- 2.5 V to 4.8 V Input Supply Voltage Range
- Internal Low Drop-Out Linear Regulator
- High-Efficiency Buck Converter for Logic
 - . Voltage Mode Control
 - . Internal Compensation
 - . Built-in 6 V, 1 A, 350 mΩ / 300 mΩ MOSFETs
- Protections
 - . Thermal Shutdown
 - . Overvoltage Protection
 - . Over Current Protection
 - . Undervoltage Protection

Applications

- LCD Notebook and Tablet Panels

Description

The SM41NC consists of high performance step-down regulator and a low-dropout voltage regulator (LDO). The step-down buck converter provides the regulated supply voltage for the timing controller IC. The high switching frequency of the converter makes it possible to use ultra-small inductors and ceramic capacitors. The output voltage of the buck converter can be adjustable by using CTLB. The LDO provides the digital logic supply voltages for the system. The output voltage of the LDO can be adjustable by using CTLA. The device is optimized for thin-film transistor (TFT) liquid crystal display (LCD) applications.

Device Information

Part	Package	Size
SM41NC	10 DFN	2.5 mm x 2.5 mm

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