

Product Overview

FAN23SV04T: 4A, 18V High Efficiency PoL Regulators

For complete documentation, see the data sheet.

The FAN23SV04T is a highly efficient, integrated synchronous buck regulator for use in tracking applications, such as DDR termination rails. The VDDQ input includes an internal 2:1 resistive voltage divider to reduce total circuit size and component count. The regulator operates with an input range from 7 V to 18 V and supports up to 4 A load currents. The device can operate from a 5 V rail ($\pm 10\%$) if VIN, PVIN, and PVCC are connected together to bypass the internal linear regulator. This device utilizes Fairchild's constant on-time control architecture to provide excellent transient response and to maintain a relatively constant switching frequency. Switching frequency and sourcing over-current protection can be programmed to provide a flexible solution for various applications. Output over-current, and thermal shutdown protections help prevent damage during fault conditions. A hysteresis feature restarts the device when normal operating temperature is reached.

Features

- VIN Range: 7 V to 18 V Using Internal Linear Regulator for Bias
- VIN Range: 4.5 V to 5.5 V with VIN/PVIN/PVCC Connected to Bypass Internal Regulator
- High Efficiency
- Continuous Output Current: 4 A
- Internal Linear Bias Regulator
- Internal VDDQ Resistor Divider
- Excellent Line and Load Transient Response
- Output Voltage Range: 0.5 to 1.5 V
- Programmable Frequency: 200 kHz to 1.5 MHz
- Programmable Soft-Start

For more features, see the data sheet

Applications

- This product is general usage and suitable for many different applications.

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

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