Product Overview

MC33023: High Speed Single-Ended PWM Controller, Up to 1 MHz Voltage-or-Current-Mode Operation

For complete documentation, see the data sheet.

The MC34023 series are high speed, fixed frequency, single-ended pulse width modulator controllers optimized for high frequency operation. They are specifically designed for Off-Line and DC-to-DC converter applications offering the designer a cost-effective solution with minimal external components. These integrated circuits feature an oscillator, a temperature compensated reference, a wide bandwidth error amplifier, a high speed current sensing comparator, and a high current totem pole output ideally suited for driving a power MOSFET. Also included are protective features consisting of input and reference undervoltage lockouts each with hysteresis, cycle-by-cycle current limiting, and a latch for single pulse metering. The flexibility of this series allows it to be easily configured for either current mode or voltage mode control.

Features

- 50 ns Propagation Delay to Output
- High Current Totem Pole Output
- Wide Bandwidth Error Amplifier
- Fully-Latched Logic with Double Pulse Suppression
- Latching PWM for Cycle-By-Cycle Current Limiting
- Soft-Start Control with Latched Overcurrent Reset
- Input Undervoltage Lockout with Hysteresis
- Low Start-Up Current (500 μA Typ)
- Internally Trimmed Reference with Undervoltage Lockout
- 90% Maximum Duty Cycle (Externally Adjustable)

For more features, see the data sheet

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

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