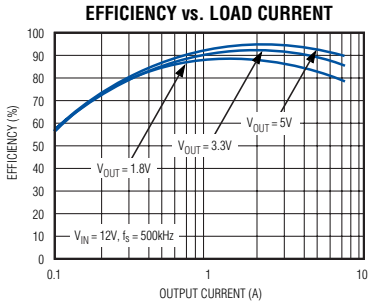
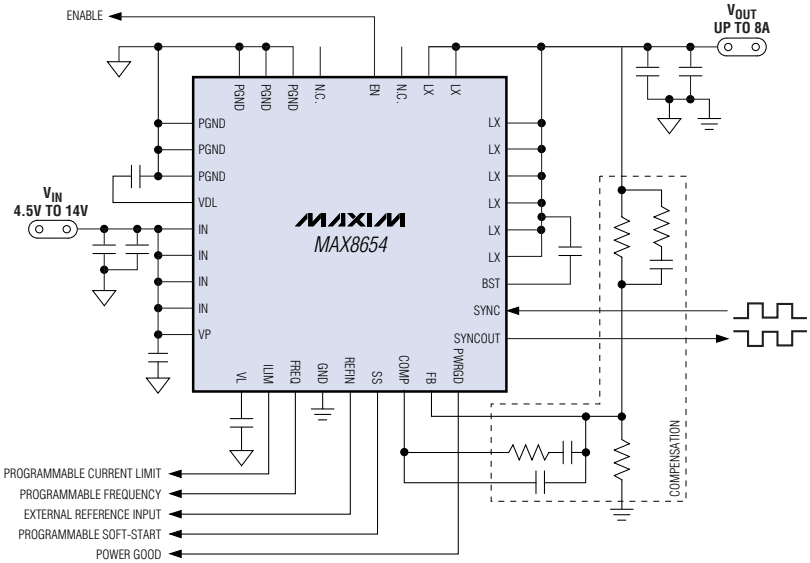
FIRST 8A, STEP-DOWN REGULATOR WITH INTEGRATED SWITCH AND UP TO 14V INPUT

Over 90% Efficiency, Up to 1MHz Switching Frequency, and a Small, 6mm x 6mm TQFN

The MAX8654 step-down regulator provides the highest integration with onboard, low on-resistance switches and full overcurrent and thermal protection. Programmable and synchronizable frequency from 300kHz to 1MHz, as well as programmable soft-start and current limit, make the MAX8654 useful for many applications. A 180° SYNC output can be used as a second converter for out-of-phase operation, reducing input capacitance and noise. PGOOD and EN facilitate sequencing, and REFIN can be used for tracking another voltage or for termination, such as in DDR1 and DDR2 applications.





Features

- ♦ ±1% Output Accuracy
- ♦ 4.5V to 14V Input Supply
- ♦ 0.6V to (0.85 x V_{IN}) Adjustable Output
- ♦ 300kHz to 1MHz Adjustable Switching or SYNC Input
- ♦ All-Ceramic Capacitor Design
- ♦ REFIN for Tracking and DDR Termination
- ♦ PGOOD and ENABLE for Sequencing
- ♦ 36-Pin, 6mm x 6mm TQFN Package with Exposed Pad

Applications

- ♦ ASIC/DSP/CPU Core Voltages
- ♦ DDR Termination
- ♦ Memory Power Supply
- ♦ Telecom/Datacom Power Supply
- ♦ Industrial Power Supply
- ♦ Point-of-Load Power Supply

MAXIM

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