42V, 2MHz Sync Buck



2.5A Output Current, 2.5µA I_Q, 94% Efficient

The LT[®]8610/11 are our first constant frequency, ultralow quiescent current high voltage monolithic synchronous buck regulators. They consume only 2.5µA of quiescent current while regulating an output of 3.3V from a 12V input source. Their low ripple Burst Mode[®] operation maintains high efficiencies at low output currents while keeping output ripple below $10mV_{P-P}$. Even at >2MHz switching frequency, high step-down ratios enable compact footprints for a wide array of applications, including automotive. The LT8611 enables accurate current regulation and monitoring for driving LEDs, charging batteries or supercaps, and for controlling power dissipation during fault conditions.

🗸 Features

- 3.4V to 42V Input Range
- + 2.5 $\mu A~I_Q$ Regulating @ 12V_IN to 3.3V_OUT
- Output Ripple <10mV_{P-P}
- 99.9% Duty Cycle for Low Dropout
- \bullet 94% Efficiency at 1A, $12V_{IN}$ to $3.3V_{OUT}$
- >2MHz Operation even with High Step-down Ratios
- Accurate Input/Output Current Regulation, Limiting and Monitoring (LT8611)

LT8610 Demo Circuit



Actual Size 15mm x 18mm **V** Info & Free Samples

www.linear.com/product/LT8610 1-800-4-LINEAR



http://video.linear.com/114

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