



News Release | www.linear.com

High Power PolyPhase[®] Synchronous Boost Controller Features -55°C to 150°C Operating Junction Temperature Range

MILPITAS, CA – May 23, 2012 – Linear Technology Corporation announces the H- and MP-grade versions of the [LTC3787](#). This high power two-phase single output synchronous step-up DC/DC controller replaces the boost diodes with high efficiency N-channel MOSFETs, eliminating the heat sink typically required in medium to high power boost converters. The LTC3787 can produce a 24V at 10A output from a 12V input at up to 97% efficiency. Its 135μA standby quiescent current, when configured for Burst Mode[®] operation, makes it ideal for automotive, industrial and medical applications. These H- and MP-grade versions are guaranteed over operating junction temperature ranges of -40°C to 150°C and -55°C to 150°C, respectively.

The LTC3787 operates from an input voltage ranging from 4.5V to 38V during start-up, maintains operation down to 2.5V after start-up and can regulate an output voltage as high as 60V. The powerful 1.2Ohm onboard N-channel MOSFET gate drivers are capable of slewing large MOSFET gates quickly. The device's current-mode architecture, clock output and phase modulation enables easy paralleling of multiple devices for up to 12-phase operation. The LTC3787 has a phase-lockable frequency from 75kHz to 850kHz or a selectable fixed frequency from 50kHz to 900kHz.

The LTC3787 is available in SSOP-28 and 4mm x 5mm QFN-28 packages. The 1000-piece price starts at \$4.88 each for the H-grade devices and \$12.39 each for the MP-grade parts. For more information, visit www.linear.com/product/LTC3787

Photo Caption: 60V PolyPhase® Synchronous Step-Up DC/DC Controller

Summary of Features: LTC3787

- Up to 97% Efficiency
- Eliminates Heat Sink in Medium to High Power Boost Converters
- Up to 60V V_{OUT} Operation
- Wide V_{IN} Ranging from 4.5V to 38V, Maintains Operation down to 2.5V after Start-Up
- Low 135 μ A Quiescent Current
- Powerful 1.2 Ohm Gate Drivers
- 100% Duty Cycle Capability for Synchronous MOSFET
- Phase Lockable Frequency from 75kHz to 850kHz
- Programmable Fixed Frequency from 50kHz to 900kHz
- Current-Mode Control
- Phase Modulation for up to 12 Phases
- Power Good Output

About Linear Technology

Linear Technology Corporation, a member of the S&P 500, has been designing, manufacturing and marketing a broad line of high performance analog integrated circuits for major companies worldwide for three decades. The Company's products provide an essential bridge between our analog world and the digital electronics in communications, networking, industrial, automotive, computer, medical, instrumentation, consumer, and military and aerospace systems. Linear Technology produces power management, data conversion, signal conditioning, RF and interface ICs, μ Module® subsystems, and wireless sensor network products. For more information, visit www.linear.com

LT, LTC, LTM, μ Module, Burst Mode, PolyPhase and  are registered trademarks of Linear Technology Corp. All other trademarks are the property of their respective owners.

Press Contacts:

North America / Worldwide

John Hamburger, Director Marketing
Communications
jhamburger@linear.com
Tel: 408-432-1900 ext 2419

Doug Dickinson, Media Relations Manager
ddickinson@linear.com
Tel: 408-432-1900 ext 2233

UK & Nordic

Alan Timmins
alan@ezwire.com
Tel: +44-1-252-629937