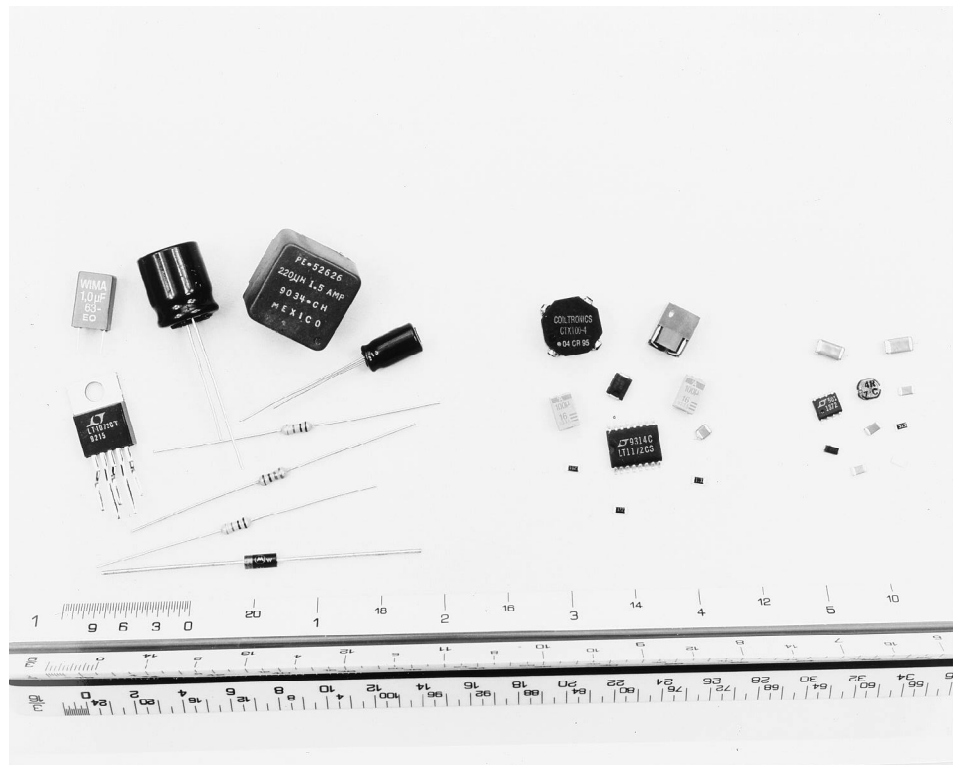


LT1372

- Uses small inductors, down to 2.2 μ H
- Constant frequency current mode architecture
- Shutdown supply current: 12 μ A
- Low minimum supply voltage: 2.7V
- Faster switching with increased efficiency
- Only 0.6 square inches of board space
- Current limited power switch: 1.5 μ A
- Regulates positive or negative outputs
- Easy external synchronization
- 8-Pin SO or MiniDIP packages

The LT1372, LT1373 and LT1377 are 500KHz, 250KHz, and 1MHz switching regulators with integrated power switches. The LT1377 includes a 1.5A low-loss switch and a 1MHz current-mode controller in an SO-8 package. The LT1372 is a 500KHz version and the LT1373 is a 250KHz version of the LT1377. These high switching frequencies use very small inductors and capacitors, resulting in the smallest footprint, highest efficiency DC/DC conversion solutions available. An output current of 250mA at 12V from a 5V input makes these DC/DC converters ideal for V_{pp} programming of multiple Intel Flash memory devices at 12V. Conversion from 3.3V to 5V is also easily handled for powering Intel Flash memory cards or logic supplies in Type II and Type III memory card applications.

Flexibility is built into the LT1372 series with special error amplifier circuitry for regulating positive or negative outputs with minimal parts count. The switching frequency can be synchronized to a higher frequency by using an external clock signal. This allows placement of the switching frequency at known locations in frequency-sensitive systems. Communications systems benefit from lower noise and the absence of interference with IF frequencies. The current-mode architecture gives excellent loop stability, with fast response to load and line transients.



LT1372 (Far right) drastically reduces component size in DC/DC Converters

Supply current of the LT1372 and LT1377 is a low 4mA, while the LT1373 is only 1mA. The low supply current and shutdown capability increases battery operating time in portable devices. In shutdown mode the quiescent current drops to 12 μ A. Input voltage range is 2.7V to 30V, and the switch can safely handle 35V. The LT1372, LT1373, and LT1377 also provide very small and efficient solutions for applications including portable computer power supplies, boost regulators, multiple output flyback supplies, Cold Cathode Fluorescent Lamp drivers, and LCD bias generators.

INTEL FLASH MEMORY SUPPORTED:

28F010, 28F001BX, 28F020, 28F002BC, 28F002BL, 28F002BV, 28F002BX, 28F200BL, 28F200BV, 28F200BX, 28F200CV, 28F004BE, 28F004BL, 28F004BV, 28F004BX, 28F004SC, 28F400BL, 28F400BV, 28F400BX, 28F400CE, 28F400CV, 28F008BE, 28F008BV, 28F008SA, 28F008SC, 28F800BV, 28F800CE, 28F800CV, 28F016SA, 28F016SC, 28F016SV, 28F016XD, 28F016XS, 28F032SA, Series 2 Cards, Series 2+ Cards, Value Series 100 Cards, Series 100 Miniature Cards

AVAILABILITY:

Now

CONTACT:

Linear Technology Corporation
Product Marketing
1630 McCarthy Boulevard
Milpitas, CA 95035
Phone: (408) 432-1900
FAX: (408) 434-6441

