

## SPECIFICATION NOTICE LT1372/LT1377

March 1998

The "Shutdown and Synchronization" information in the Applications Information section of the LT®1372/LT1377 data sheet has been modified. The new information is shown below in **bold**. For complete specifications, typical performance characteristics and applications information, please see the LT1372/LT1377 data sheet.

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## APPLICATIONS INFORMATION

## **Shutdown and Synchronization**

The dual function S/S pin provides easy shutdown and synchronization. It is logic level compatible and can be pulled high, tied to  $V_{IN}$  or left floating for normal operation. A logic low on the S/S pin activates shutdown, reducing the part's supply current to  $12\mu A$ . Typical synchronization range is from 1.05 to 1.8 times the part's natural switching frequency, but is only guaranteed between 600kHz and 800kHz (LT1372) or 1.2MHz and 1.6MHz (LT1377). At start-up, the synchronization signal should not be applied until the feedback pin is above the frequency shift voltage of 0.7V. If the NFB pin is used, synchronization should not be applied until the NFB pin is more negative than -1.4V. A  $12\mu s$  resetable shutdown delay network guarantees the part will not go into shutdown while receiving a synchronization signal.

Caution should be used when synchronizing above 700kHz (LT1372) or 1.4MHz (LT1377) because at higher sync frequencies the amplitude of the internal slope compensation used to prevent subharmonic switching is reduced. This type of subharmonic switching only occurs when the duty cycle of the switch is above 50%. Higher inductor values will tend to eliminate problems.

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