

LS8297, LS8297CT and LS8397 PRESS RELEASE

Precision, Low Cost, Stepper Motor Controller ICs for Bipolar and Unipolar Motors

LSI/CSI announces the availability of three new high performance stepper motor controller ICs. Designated **LS8297**, **LS8297CT** and **LS8397**, these ICs can replace the expensive **L297** in all applications, while providing additional features not available in **L297**. According to Pete Visconti, LSI's VP Sales and Marketing, all these devices offer half-step and full-step sequences in both normal drive and wave drive modes similar to the **L297**. In addition the **LS8297CT** and the **LS8397** offer correction for the torque-ripple, not provided in **L297** half-step sequence. A power saving holding-torque mode is also available in **LS8397** for maintaining the drivers at a reduced power level when the motor is not turning. Four phase outputs and two inhibit outputs are provided for driving external H-bridge drivers, allowing for the selection of a standard driver, such as the popular L298 or an application specific custom driver. An external reference voltage, in conjunction with the winding current sense voltages, regulate the PWM duty cycles of the driver outputs. One of two decay modes, fast-decay and slow-decay, can be selected to suit the characteristics of the motor winding.

LS8297 and LS8297CT features include:

- Pin-for-pin cost effective replacement for **L297**
- Half and full step sequences
- Normal-drive/wave-drive
- Torque ripple correction in **LS8297CT**
- PWM chopper circuit for motor current control
- Inputs for step, forward/reverse, reset and output blanking control
- Supply current < 400uA
- Supply voltage: 4.5V to 7V

LS8397 includes all of the above plus a mode for reduced power holding torque.

LS8297 and **LS8297CT** are available in available in 20-pin DIP, SOIC and TSSOP packages

LS8397 is available in 24-pin DIP, SOIC and TSSOP packages