January 2012

Microsemi®

ERRATA SHEET
MAX24510

Revision A1 Errata

The errata listed below describe situations where MAX24510 revision A1 components perform differently than expected or differently than described in the data sheet. Microsemi intends to correct these errata in subsequent die revisions.

This errata sheet only applies to MAX24510 revision A1 components. Revision A1 components are branded on the topside of the package with a six-digit code in the form yywwA1, where yy and ww are two-digit numbers representing the year and work week of manufacture, respectively.

1) On-Chip Crystal Oscillator Causes More Generated Jitter Than An External Oscillator

Description:
The on-chip crystal oscillator (internal XO) causes higher device output jitter and worse power supply noise rejection than when an external oscillator is used. When clocked from the internal XO, device output jitter is typically in a range from 0.6 to 0.9ps RMS (12kHz to 20MHz) compared to 0.3 to 0.6ps RMS when clocked from a low-noise external oscillator. The power supply noise rejection performance is shown in the *Minimizing MAX24xxx Output Jitter* application note.

The issues with the internal XO are understood, and the generated jitter and power supply noise rejection are expected to be significantly improved for the next revision of this device.

Workaround:
Consider providing sites on the board for an external oscillator for use with a rev A1 device and a crystal for use with a next-revision device.