DALLAS
SEMICONDUCTOR
ERRATA SHEET **DS80C310** **Revision A1** **04/28/03**

Revision A1 may be identified by the date/revision brand yywwA1, where yy and ww are the year and work-week of manufacture, respectively. This errata sheet is valid only when used in conjunction with the most current version of the data sheet available from Dallas Semiconductor on our website at www.maxim-ic.com.

ERRATA

1. The serial port operating in mode 0 may violate the t_{QVXL} spec when the external crystal speed is above 25MHz.

   Work Around: Use the rising edge only of the clock to latch output data if the external crystal speed is above 25MHz.

2. $t_{LLAX}2$ timings at 25MHz will be a minimum value of $0.5t_{CLCL}$ - 7ns independent of the Stretch MOVX settings.

   Work Around: This will be corrected in the next revision of this device.

3. When any reset occurs during the execution of an extended MOVX data memory access, most instructions located at 0000h can fail to execute correctly. The exception is the LCALL instruction, mentioned below. In each case the failure causes the program to incorrectly execute the first several machine cycles of the affected instruction(s).

   Work Around: Use the instruction LCALL at location 0000h (the reset vector) to jump to the starting point of the main user code. This will use two bytes of the stack, which can be easily restored if necessary by resetting the stack pointer.

4. When a short reset stimulus occurs during the execution of an extended MOVX data memory access, the ALE signal may not be driven with the strong transition drivers (V_{OH2} test levels) on the first instruction fetch following reset. This reduced drive current may not allow the ALE signal to rise to a logic high level before the first instruction fetch at location 0000h, possibly latching an incorrect address. This situation will only occur during a watchdog timer reset (the timer generates a momentary pulse to the internal reset circuitry) or when an external reset pulse of less than 2µs is asserted. This erratum does not affect a power-on reset as the internal crystal warm-up period counter provides a reset pulse of greater than 2µs.

   Work Around: If the watchdog timer reset function is employed, use the watchdog timer interrupt to ensure that the device will not be executing MOVX instructions when the watchdog timer reset occurs. If an external reset stimulus is used, be sure that it is at least 2µs in duration.