DALLAS SEMICONDUCTOR /MAXIM

DS87C520
EPROM High-Speed Microcontroller

www.maxim-ic.com

REVISION A8 ERRATA

The errata listed below describe situations where DS87C520 revision A8 components perform differently than expected or differently than described in the data sheet. Dallas Semiconductor intends to correct these errata in subsequent die revisions.

This errata sheet only applies to DS87C520 revision A8 components. Revision A8 components are branded on the topside of the package with a six-digit code in the form yywwA8, where yy and ww are two-digit numbers representing the year and workweek of manufacture, respectively. To obtain an errata sheet on another DS87C520 die revision, visit our website at www.maxim-ic.com/errata.

1. DEVICE USES REVISION-SPECIFIC EPROM PROGRAMMING PARAMETERS

Description:
EPROM programming parameters have been modified. For revision A8 devices only, V_{PP} = 12.5 V and t_{GLGH} = 88µs.

Work Around:
None. This erratum pertains only to this revision of the device.

2. SHORT RESET DURING MOVX INSTRUCTION CAUSES INITIAL WEAK ALE SIGNAL

Description:
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.

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