ERRATA

1. Timer 0 will only clock at the divide-by-4 rate if it is being used in mode 3 with the TMOD.2 bit set. Timer 0 can be configured correctly in both the divide-by-4 and divide-by-12 modes if the TMOD is cleared.

Work Around: None. This erratum will be corrected in a future revision of the device.

2. 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 $2\mu s$ is asserted. This errata does not affect a power-on reset as the internal crystal warmup period counter provides a reset pulse of greater than $2\mu s$.

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 $2\mu s$ in duration.

3. The bandgap reference does not operate properly, resulting in a $V_{RST}$ minimum specification below $2.7V$. This means that the power-fail reset will not activate at the specified voltages. As a result, the power-fail interrupt feature should not be used. Valid processor operation between $2.7V$ and $V_{RST}$ minimum specification is not guaranteed.

Work Around: None. This erratum will be corrected in a future revision of the device.