Parallax SX-Key Errata

Please feel free to contact our technical support engineers by e-mail to sxtech@parallaxinc.com or by telephone (916) 624-8333. The most recent changes to our development tools will be posted on http://www.parallaxinc.com as they become available, and changes to the SX chip are located at http://www.scenix.com.

SX PART		ERRATA
Date Code	Revision	
9747, 9749, 9750, 9810, 9811, 9812	2.1	Internal RC operates at 3.2 MHz maximum, not 4 MHz as per specification. Power-On-Reset (POR) will not work if Vdd rise time is slower than 100 ms. Programming time is 100ms per word. Erase time is 150ms per word Debug facility is not enabled. Brown-out is 4.2 volts or off; 2.5 and 1.3 volts not supported.
9814, 9818, 9819	2.4	Debug facility is enabled. Debugging in Parallax SX-Key Demo Board requires removal of 50 MHz ceramic resonator (also true for in-system debugging on customer target system). Requires 1MΩ resistor across OSC1 and OSC2 to run in customer circuit or in SX-Key Demo Board Rev B. Brown-out is 4.2 volts or off; 2.5 and 1.3 volts not supported. Programming time is 75ms per word. Erase time is 150ms per word.
9815	2.5	

SX-Key	ERRATA
Rev. C	Supports SX programming only. Debug features are not implemented. For use with SX-Key software version 0.2 and 0.3.
Rev. D	Supports SX programming only. Debug features are not implemented. For use with SX-Key software version 0.2 and 0.3.
Rev. E	Supports SX programming and debug/emulation. Includes on-board programmable oscillator. For use with SX-Key software version 0.6. (Click on Help-> Extra and type in the desired frequency. Default is 50 Mhz. Programmable oscillator is active during debug.)

SX-Key Software	ERRATA
0.2 and 0.3	Program-only software. Works with SX-Key Rev. C and D. Directives IF...ELSE...ENDIF, REPT, MACRO, EXPAND and ERROR are not implemented. Generating a listing with Run -> Listing, or Ctrl-L, overwrites source code in editor window (you must save source code before list generation). Use BOR25 to turn on the brown-out feature (4.2) volts. BOR40 and BOR13 are not supported in the SX chip.
0.6	Program and debug software, initial release. Works with SX-Key Rev. E. Brownout is activated with the directive BROWNOUT, not BORxx.

SX-Key Demo Board	ERRATA
Rev. B	Debugging with SX Rev. 2.4+ requires removal of 50MHz resonator. (Parallax provided 7.5 VDC 300 mA power supplies (enough current for programming) with previous demo board shipments. In-system debugging requires a 9 VDC 1 A power supply to utilize the SX-Key's internal oscillator circuitry.)
Rev. C	Resister between OSC1 and OSC2 accommodates SX Revision 2.4. (Parallax provided 7.5 VDC 300 mA power supplies (enough current for programming) with previous demo board shipments. In-system debugging requires a 9 VDC 1 A power supply to utilize the SX-Key's internal oscillator circuitry.)
sxdemo.src	Virtural Peripheral sample source code runs in SX-Key Demo Board Rev A through Rev C. To run this code you must have the 50 MHz resonator installed on the demo board, or remove the resonator and enable the SX-Key Rev. E's on-board oscillator (Click on Help-> Extra and type in 50000000.)