Ubicom SX18/28/48/52 FUSE and FUSEX word mappings By S.G.Willis June 21, 2003 www.semis.demon.co.uk

When setting the fuses for different SX chips these tables show the relative mappings between old and new chips. For **old SX18/28** chips FUSEX[11:7] sets the internal oscillator frequency which is also used during programming for synchronisation. After Erase all bits are set back to '1' which may cause a rapid change in the oscillator frequency, resulting in a potential loss of synchronisation by the programming hardware. One solution to this problem is set FUSEX[11:7] to '1' in the fuse settings so that the oscillator frequency does not change during programming.

FUSE:

	11	10	9	8	7	6	5	4	3	2	1	0
SX1828 OLD	TURBO	SYNC	OPTIONX	STACKX	IRC	DIV2	DIV1	DIV0	СР	WDTE	FOSC1	FOSC0
SX1828 NEW	TURBO	SYNC			IRC	DIV1 /IFBD	DIV0 /FOSC2		СР	WDTE	FOSC1	FOSC0
SX4852		SYNC			IRC	DIV1 /IFBD	DIV0 /FOSC2	XTLBUF	СР	WDTE	FOSC1	FOSC0

FUSEX:

	11	10	9	8	7	6	5	4	3	2	1	0
SX1828 OLD	PRESET	PRESET	PRESET	PRESET	PRESET	CF	BOR1	BOR0	RAM1	RAM0	MEM1	MEM0
SX1828 NEW	IRC TR I M2	PINS	IRC TR I M1	IRC TR I M0	OPTIONX /STACKX	CF	BOR1	BOR0	BOR TR I M1	BOR TR I M0	BP1	BP0
SX4852	IRC TR I M2	SLEEP CLK	IRC TR I M1	IRC TR I M0		CF	BOR1	BOR0	BOR TR I M1	BOR TR I M0	DRT1	DRT0