

## Errors in *Software and Hardware Engineering: Motorola M68HC12*

April 9, 2002

Pg	Error Correction	Thanks
18	Line 4 of Example 2-4 should be: 0007 A6E9C0 4 ldaa -!64,y ; (Y -64) 9-bit offset -> A	Chun Chiu Luk
29	A label must start with an alphabetic character <b>or an underscore</b> ( <u>_</u> )	John Ritchie
34	Line 7 should read: 0001 01 7 SUB: DB {TWO-ONE} ;Subtraction	Roger Kafrouni
36	In line 13 of Example 3-10, the correct pseudo-op should be DS not DB. It should read: DATA_1: DS \$20 ; Set aside \$20 bytes	Prof. Jerry Sobelman
38	In line 2 and 3 of Example 3-12, the correct pseudo-op should be DS. These lines should read: BUFFER: DS COUNT_3 ; Allocates \$10 bytes BUFFER1: DS 2*COUNT_3 ; Allocates \$10 words	Prof. Jerry Sobelman
54	In the right hand column of Table 4-1, the text for SEI Set interrupt mask should not be bolded. This instruction is available in the M68HC11 instruction set.	Jim Workman
55	The last paragraph should read: ..."The <i>effective address</i> is calculated by adding an offset to either the X, Y, <b>S</b> , or sometimes, the PC register ( <b>xysp</b> ).	Jim Workman
57	Table 4-5: Push D (PSHD) instruction missing from the table	Douglas Summerville
71	In section 4.8, the instruction format for BCLR is given twice. One of these should be for BSET, i.e.: BCLR Operand,Mask BSET Operand,Mask	Prof. Jerry Sobelman
77	Table 4-14: CLR instruction does not use inherent addressing	Douglas Summerville
88	Example 4-36: The example 0.375/0.5 should show the dividend to be <b>.0110</b> , not .0100. .0110 .1100 ----- : ----- .1000 1000 )0110.0000	Neerav Jain
89	Table 4-21: For the EDIV and EDIVS, the quotient is placed into the Y register, not the X register.	Bilal Anwer
89	Table 4-21: The EDIVS instruction should state it is for 32-bit, integer, <b>signed</b> data	Max Koessick
92, 102	In Tables 4-22 and 4-32, the symbolic operation for andcc and orcc should include "-> CCR," i.e. CCR.#data -> CCR and CCR OR #data -> CCR.	Prof. Jerry Sobelman
96	In Example 4-43, line 2, the comment says "Offset to Port C" but it should be "Offset to Port H."	Prof. Jerry Sobelman
104	The second bullet in the Chapter Summary Points should read: • Table <b>4-1</b> is useful for quickly finding an operation in the category you want.	Jim Workman

131	The toupper routine destroys (sets to zero) the contents of the A register while returning the upper-case character in the B register. The bottom line is, D-Bug12 can be counted upon to mess up registers.	David Fleenor
147	In Example 6-5: 1. line 4: A/D data port should be \$70, not \$20. 2. line 15: need the # sign for the immediate operand VALVE_OFF 3. line 20: need the # sign for the immediate operand VALVE_ON	Prof. Jerry Sobelman
150	In Example 6-8 lines 19 and 22 need the # sign for the immediate operands LIGHT_ON and LIGHT_OFF	Prof. Jerry Sobelman
224	In problem 8-13, the third assumption should be labeled c.	Burt Blair
307	In the third line from the top of the page, it should state that the prescaler bits can change the prescaler to divide by 1, 2, 4, <b>8</b> , 16 or 32.	James Lepp
363	At the bottom of the page, the SC1BDL - \$00C9 should be labeled SC11 Baud Rate Control Register <b>Low</b> .	Michael Bendzick
437	The Fan Speed equation should be: <i>Fan Speed = \$7380/\$118 = \$69</i>	Salvador Saucedo
541	The answers for problem 3.1 should read: a. The ASCII character X. 'X', "X", \$58, !88, %01011000, Q01011000 b. The ASCII character x. 'x', "x", \$78, !120, %01111000, Q01111000 c. 100 base 10 !100, \$64, %01100100, Q01100100 d. 64 base 16 !100, \$64, %01100100, Q01100100	Prof. Jerry Sobelman

Please let me know if you find other errors. Please email me at [fcady@ee.montana.edu](mailto:fcady@ee.montana.edu). Thanks.