

*Addendum*

HC908AS60AD/D  
11/2001

Addendum to  
MC68HC908AS60  
Technical Data

This addendum provides changes to the *MC68HC908AS60 Technical Data* (Motorola document order number MC68HC908AS60/D Rev. 1.0).

**NOTE:** *To provide the most up-to-date information, the revision of our documents on the World Wide Web will be the most current. Your printed copy may be an earlier revision. To verify you have the latest information available, refer to:*

<http://www.motorola.com/semiconductors/>

---

**Page 390**    **22.5 Interrupts** — Change the first bulleted paragraph.

- From:*
- TIMA overflow flag (TOF) — The TOF bit is set when the TIMA counter value rolls over to \$0000 after matching the value in the TIMA counter modulo registers. The TIMA overflow interrupt enable bit, TOIE, enables TIMA overflow CPU interrupt requests. TOF and TOIE are in the TIMA status and control register.
- To:*
- TIM overflow flag (TOF) — The timer counter value changes on the falling edge of the internal bus clock. The timer overflow flag (TOF) bit is set on the falling edge of the internal bus clock following the timer rollover to \$0000. The TIM overflow interrupt enable bit, TOIE, enables TIM overflow interrupt requests. TOF and TOIE are in the TIM status and control registers.



---

**Page 402** Change the CHxMAX bit description.

*From:* CHxMAX — Channel x Maximum Duty Cycle Bit

When the TOVx bit is at logic 0, setting the CHxMAX bit forces the duty cycle of buffered and unbuffered PWM signals to 100 percent. As **Figure 22-8** shows, the CHxMAX bit takes effect in the cycle after it is set or cleared. The output stays at the 100 percent duty cycle level until the cycle after CHxMAX is cleared.

*To:* CHxMAX — Channel x Maximum Duty Cycle Bit

When the TOVx bit is at logic 1 and clear output on compare is selected, setting the CHxMAX bit forces the duty cycle of buffered and unbuffered PWM signals to 100 percent. As **Figure 22-8** shows, the CHxMAX bit takes effect in the cycle after it is set or cleared. The output stays at 100 percent duty cycle level until the cycle after CHxMAX is cleared.

**NOTE:** *The PWM 0 percent duty cycle is defined as output low all of the time. To generate the 0 percent duty cycle, select clear output on compare and then clear the TOVx bit (CHxMAX = 0). The PWM 100 percent duty cycle is defined as output high all of the time. To generate the 100 percent duty cycle, use the CHxMAX bit in the TSCx register.*



**Home Page:**

[www.freescale.com](http://www.freescale.com)

**email:**

[support@freescale.com](mailto:support@freescale.com)

**USA/Europe or Locations Not Listed:**

Freescale Semiconductor

Technical Information Center, CH370

1300 N. Alma School Road

Chandler, Arizona 85224

(800) 521-6274

480-768-2130

[support@freescale.com](mailto:support@freescale.com)

**Europe, Middle East, and Africa:**

Freescale Halbleiter Deutschland GmbH

Technical Information Center

Schatzbogen 7

81829 Muenchen, Germany

+44 1296 380 456 (English)

+46 8 52200080 (English)

+49 89 92103 559 (German)

+33 1 69 35 48 48 (French)

[support@freescale.com](mailto:support@freescale.com)

**Japan:**

Freescale Semiconductor Japan Ltd.

Headquarters

ARCO Tower 15F

1-8-1, Shimo-Meguro, Meguro-ku

Tokyo 153-0064, Japan

0120 191014

+81 2666 8080

[support.japan@freescale.com](mailto:support.japan@freescale.com)

**Asia/Pacific:**

Freescale Semiconductor Hong Kong Ltd.

Technical Information Center

2 Dai King Street

Tai Po Industrial Estate,

Tai Po, N.T., Hong Kong

+800 2666 8080

[support.asia@freescale.com](mailto:support.asia@freescale.com)

**For Literature Requests Only:**

Freescale Semiconductor

Literature Distribution Center

P.O. Box 5405

Denver, Colorado 80217

(800) 441-2447

303-675-2140

Fax: 303-675-2150

[LDCForFreescaleSemiconductor@hibbertgroup.com](mailto:LDCForFreescaleSemiconductor@hibbertgroup.com)

RoHS-compliant and/or Pb- free versions of Freescale products have the functionality and electrical characteristics of their non-RoHS-compliant and/or non-Pb- free counterparts. For further information, see <http://www.freescale.com> or contact your Freescale sales representative.

For information on Freescale's Environmental Products program, go to <http://www.freescale.com/epp>.

Information in this document is provided solely to enable system and software implementers to use Freescale Semiconductor products. There are no express or implied copyright licenses granted hereunder to design or fabricate any integrated circuits or integrated circuits based on the information in this document. Freescale Semiconductor reserves the right to make changes without further notice to any products herein. Freescale Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Freescale Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters which may be provided in Freescale Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Freescale Semiconductor does not convey any license under its patent rights nor the rights of others. Freescale Semiconductor products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Freescale Semiconductor product could create a situation where personal injury or death may occur. Should Buyer purchase or use Freescale Semiconductor products for any such unintended or unauthorized application, Buyer shall indemnify and hold Freescale Semiconductor and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Freescale Semiconductor was negligent regarding the design or manufacture of the part.



Freescale Semiconductor, Inc.