

Freescale Semiconductor Documentation Errata

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MC68HC08 Family Data Sheets

Incorrect Values for 32 kHz Crystal Oscillator Configuration

Description

This erratum applies to data sheets for MC68HC08 family devices that use low frequency crystals as the reference for the Clock Generator Module (CGM). In the electrical specification section of these data sheets, the maximum crystal frequency, feedback bias resistor, and series resistor values may be specified incorrectly. This erratum also includes the typical load capacitance values for a typical 32.768 kHz crystal that will appear in data sheet revisions.

Documents Affected

The following data sheets are affected.

MC68HC908AP64	MC68HC908GP32
MC68HC08GP32A	MC68HC908GR8
MC68HC908GR16	MC68HC908LJ12
MC68HC908LJ24	MC68HLC908QY4
MC68HC908QF4	MC68HC908SR12

Correction

The correct specification is given in the following table.





Characteristic	Symbol	Min	Тур	Max	Unit
Crystal reference frequency	fxclk, fxtalclk, foscxclk,	30	32.768	100	kHz
Crystal load capacitance ⁽¹⁾	C _L	_	12.5	_	pF
Crystal fixed capacitance ⁽²⁾	C ₁	_	15	_	pF
Crystal tuning capacitance ⁽³⁾	C ₂	_	15	_	pF
Feedback bias resistor	R _B	1	10	22	ΜΩ
Series resistor	R_S	100	330	470	kΩ

NOTES:

- 1. Crystal manufacturer value.
- 2. Capacitor on OSC1 pin. Does not include parasitic capacitance due to package, pin, and board.
- 3. Capacitor on OSC2 pin. Does not include parasitic capacitance due to package, pin, and board.

How to Reach Us:

Home Page:

www.freescale.com

E-mail:

support@freescale.com

USA/Europe or Locations Not Listed:

Freescale Semiconductor Technical Information Center, CH370 1300 N. Alma School Road Chandler, Arizona 85224 +1-800-521-6274 or +1-480-768-2130 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

Japan:

Freescale Semiconductor Japan Ltd. Headquarters ARCO Tower 15F 1-8-1, Shimo-Meguro, Meguro-ku, Tokyo 153-0064 Japan 0120 191014 or +81 3 5437 9125 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

For Literature Requests Only:

Freescale Semiconductor Literature Distribution Center P.O. Box 5405
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