

MC68HC16Z3

Product Preview **16-Bit Modular Microcontroller**

Features

- System Integration Module
 - External bus support
 - 12 programmable chip-select outputs
 - System protection logic
 - Watchdog timer, clock monitor, and bus monitor
 - Two 8-bit dual function ports
 - One 7-bit dual function port
 - Phase-locked loop (PLL) clock system
- CPU16
 - 16-bit architecture
 - Full set of 16-bit instructions
 - Three 16-bit index registers
 - Two 16-bit accumulators
 - Control-oriented digital signal processing capability
 - 16-bit multiply and accumulate (digital signal processing support)
 - High-level language support
 - Fast interrupt response time
 - Hardware breakpoint signal/Background debugging mode
 - Fully static implementation
- Analog-to-Digital Converter
 - Eight channels, eight result registers
 - Eight automated modes
 - Three result alignment modes
 - One 8-bit digital input port
- Queued Serial Module
 - Enhanced serial communication interface
 - Queued serial peripheral interface
 - One 8-bit dual function port
- General-Purpose Timer
 - 16-bit free-running counter with prescaler for capture/compare subsystem
 - Three input capture channels
 - Four output compare channels
 - One input capture/output compare channel
 - One pulse accumulator/event counter input
 - Two pulse-width modulation outputs with user-selectable clock source
 - Optional external clock input
- 4-Kbyte Standby RAM
 - External standby voltage supply input
- Masked ROM Module
 - 8-Kbyte array, accessible as bytes or words

Home Page:

www.freescale.com

email:

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

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
+81 2666 8080
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
Denver, Colorado 80217
(800) 441-2447
303-675-2140
Fax: 303-675-2150
LDCForFreescaleSemiconductor@hibbertgroup.com

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