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

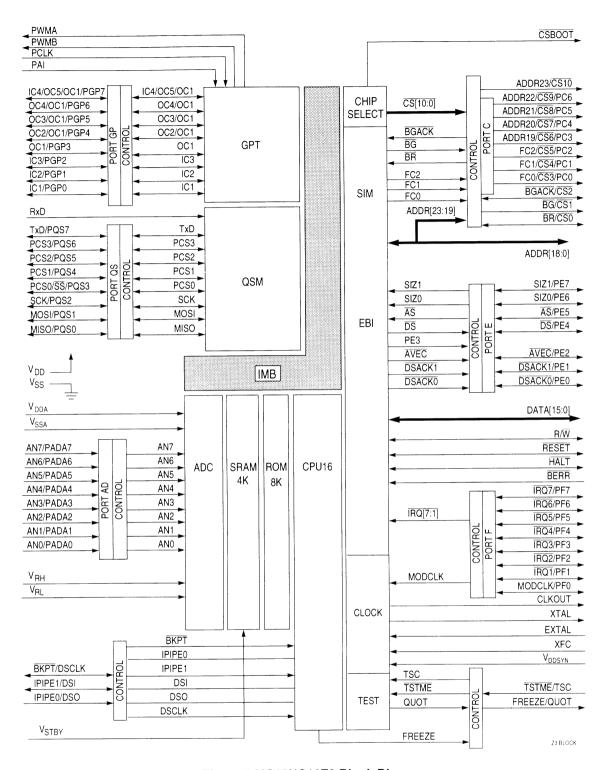


Figure 1 MC68HC16Z3 Block Diagram

MC68HC16Z3PP/D MOTOROLA

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:

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