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Freescale Semiconductor, Inc.

MC68HC912DT128A
MC68HC912DG128A
MC68HC912DT128C
MC68HC912DG128C
MC68HC912DT128P
MC68HC912DG128P

Technical Data

M68HC12 Microcontrollers

MC912DT128A/D
Rev. 4, 10/2003

MOTOROLA.COM/SEMICONDUCTORS



Freescale Semiconductor, Inc.

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MC68HC912DT128A

MC68HC912DG128A

MC68HC912DT128C


MC68HC912DG128C

MC68HC912DT128P

MC68HC912DG128P

Technical Data Rev 4.0

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1.2 Introduction

The MC68HC912DT128A microcontroller unit (MCU) is a 16-bit device composed of standard on-chip peripherals including a 16-bit central processing unit (CPU12), 128K bytes of flash EEPROM, 8K bytes of RAM, 2K bytes of EEPROM, two asynchronous serial communications interfaces (SCI), a serial peripheral interface (SPI), an inter-IC interface (I²C), an enhanced capture timer (ECT), two 8-channel, 10-bit analog-to-digital converters (ADC), a four-channel pulse-width modulator (PWM), and three CAN 2.0 A, B software compatible modules (MSCAN12). System resource mapping, clock generation, interrupt control and bus interfacing are managed by the lite integration module (LIM). The MC68HC912DT128A has full 16-bit data paths throughout, however, the external bus can operate in an 8-bit narrow mode so single 8-bit wide memory can be interfaced for lower cost systems. The inclusion of a PLL circuit allows power consumption and performance to be adjusted to suit operational requirements. In addition to the I/O ports available in each module, 16 I/O ports are available with Key-Wake-Up capability from STOP or WAIT mode.