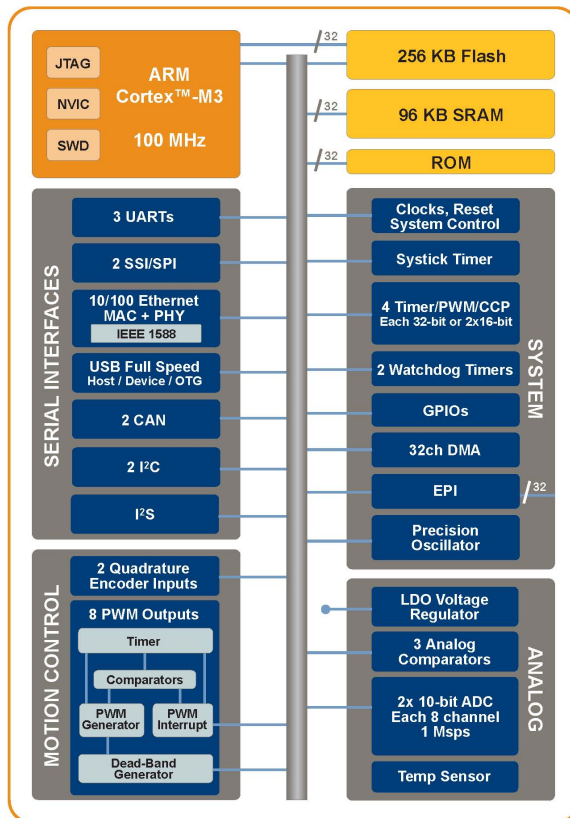


LM3S9B95 Microcontroller



LUMINARY MICRO®



Product Features

- ARM® Cortex™-M3 Processor Core
 - 80 and 100-MHz operation; 100 and 125 DMIPS performance
 - ARM Cortex SysTick Timer
 - Nested Vectored Interrupt Controller (NVIC)
- On-Chip Memory
 - 256 KB single-cycle Flash
 - 96 KB single-cycle SRAM
 - Internal ROM loaded with StellarisWare™ software:
 - Stellaris® Peripheral Driver Library
 - Stellaris® Boot Loader
 - Advanced Encryption Standard (AES) cryptography tables
 - Cyclic Redundancy Check (CRC) error detection functionality
- External Peripheral Interface (EPI)
 - 8/16/32-bit dedicated parallel bus for external peripherals
 - Supports SDRAM, SRAM/Flash, FPGAs, CPLDs
- Advanced Serial Integration
 - 10/100 Ethernet MAC and PHY with IEEE 1588 PTP hardware support
 - Two CAN 2.0 A/B controllers
 - USB 2.0 OTG/Host/Device
 - Three UARTs with IrDA and ISO 7816 support (one UART with full modem controls)
 - Two I²C modules

- Two Synchronous Serial Interface modules (SSI)
- Integrated Interchip Sound (I²S) module
- System Integration
 - Direct Memory Access Controller (DMA)
 - System control and clocks including on-chip precision 16-MHz oscillator
 - Four 32-bit timers (up to eight 16-bit)
 - Eight Capture Compare PWM pins (CCP)
 - Real-Time Clock
 - Two Watchdog Timers
 - One timer runs off the main oscillator
 - One timer runs off the precision internal oscillator
 - Up to 65 GPIOs, depending on configuration
 - Highly flexible pin muxing allows use as GPIO or one of several peripheral functions
 - Independently configurable to 2, 4 or 8 mA drive capability
 - Up to 4 GPIOs can have 18 mA drive capability
- Advanced Motion Control
 - Eight advanced PWM outputs for motion and energy applications
 - Four fault inputs to promote low-latency shutdown
 - Two Quadrature Encoder Inputs (QEI)
- Analog
 - Two 10-bit Analog-to-Digital Converters (ADC) with sixteen analog input channels and sample rate of one million samples/second
 - Three Analog Comparators
 - 16 Digital Comparators
 - On-chip voltage regulator
- JTAG and ARM Serial Wire Debug (SWD)
- 100-pin LQFP package
- Industrial (-40°C to 85°C) Temperature Range

Target Applications

- Motion control
- Factory automation
- Fire and security
- HVAC and building control
- Power and energy
- Transportation
- Test and measurement equipment
- Medical instrumentation
- Remote monitoring
- Electronic point-of-sale (POS) machines
- Network appliances and switches
- Gaming equipment



LM3S9B95 Microcontroller



LUMINARY MICRO®

Ordering Information

Orderable Part Number	Description
LM3S9B95-IQC80	Stellaris® LM3S9B95-IQC80 Microcontroller Industrial Temperature (80 MHz)
LM3S9B95-IQC100	Stellaris® LM3S9B95-IQC100 Microcontroller Industrial Temperature (100 MHz)

Luminary Micro, Inc. • 108 Wild Basin, Suite 350 • Austin, TX 78746
Main: +1-512-279-8800 • Fax: +1-512-279-8879 • <http://www.luminarymicro.com>

Copyright © 2009 Luminary Micro, Inc. All rights reserved. Stellaris, Luminary Micro, and the Luminary Micro logo are registered trademarks of Luminary Micro, Inc. or its subsidiaries in the United States and other countries. ARM and Thumb are registered trademarks and Cortex is a trademark of ARM Limited. Other names and brands may be claimed as the property of others.

