

APPLICATIONS:

- White Goods
- Industrial Control



**SHARP's New Line
of MCUs and
System-on-Chips**

LH75411 16/32-bit Microcontroller

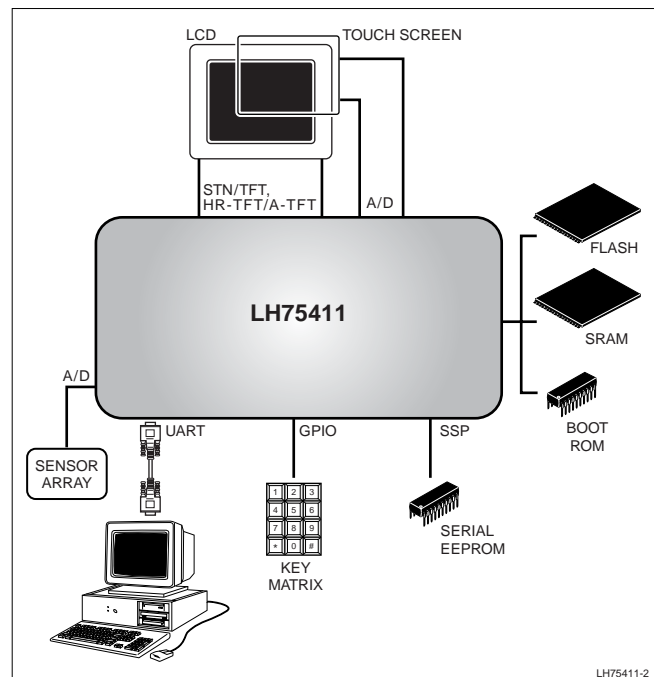
FEATURES

- ARM7TDMI™ Core
- High Performance (50 MHz)
 - Internal PLL-driven or External Clock
- 32KB On-chip SRAM
 - 16KB TCM (0 Wait State) SRAM
 - 16KB Internal SRAM
- Clock and Power Management
 - Low Power Modes: Standby, Sleep, Stop
- Color and Grayscale LCD Controller
 - Up to QVGA (320 × 240)
 - 12-bit Video Bus
 - Supports STN, TFT, HR-TFT, A-TFT Displays
 - 8-bit (256) Color Palette
- Eight Input, 10-bit A/D Converter
- Four DMA Channels
- Integrated Touch Screen Controller
- Serial Interfaces
 - 3 × UARTs
 - SSP
- Full-featured Real Time Clock (RTC)
 - Operates from 32 kHz XTAL
- Three 16-bit Counter/Timers with Capture/Compare/PWM Capability
- Watchdog Timer
- Low Voltage Detector
- JTAG Debug Interface and Boundary Scan
- 3.3 V Operating Voltage
- -40°C to +85°C Operating Temperature
- 144-pin LQFP Package

DESCRIPTION

The LH75411 is a low cost microcontroller that utilizes the ARM7TDMI core integrated with a wide variety of functions including the ability to control STN, color STN, TFT, HR-TFT, and Advanced-TFT displays with up to 256 colors. Other functions include: 32KB of on-chip SRAM, three UARTs, SSP, three 16-bit Counter/Timers, Analog to Digital Converter with integrated touch screen controller, Watchdog Timer, and Low Voltage Detector. The LH75411 operates up to 50 MHz at 3.3 V over the industrial temperature range of -40°C to +85°C and is offered in a 144-pin LQFP package.

SYSTEM APPLICATION EXAMPLE

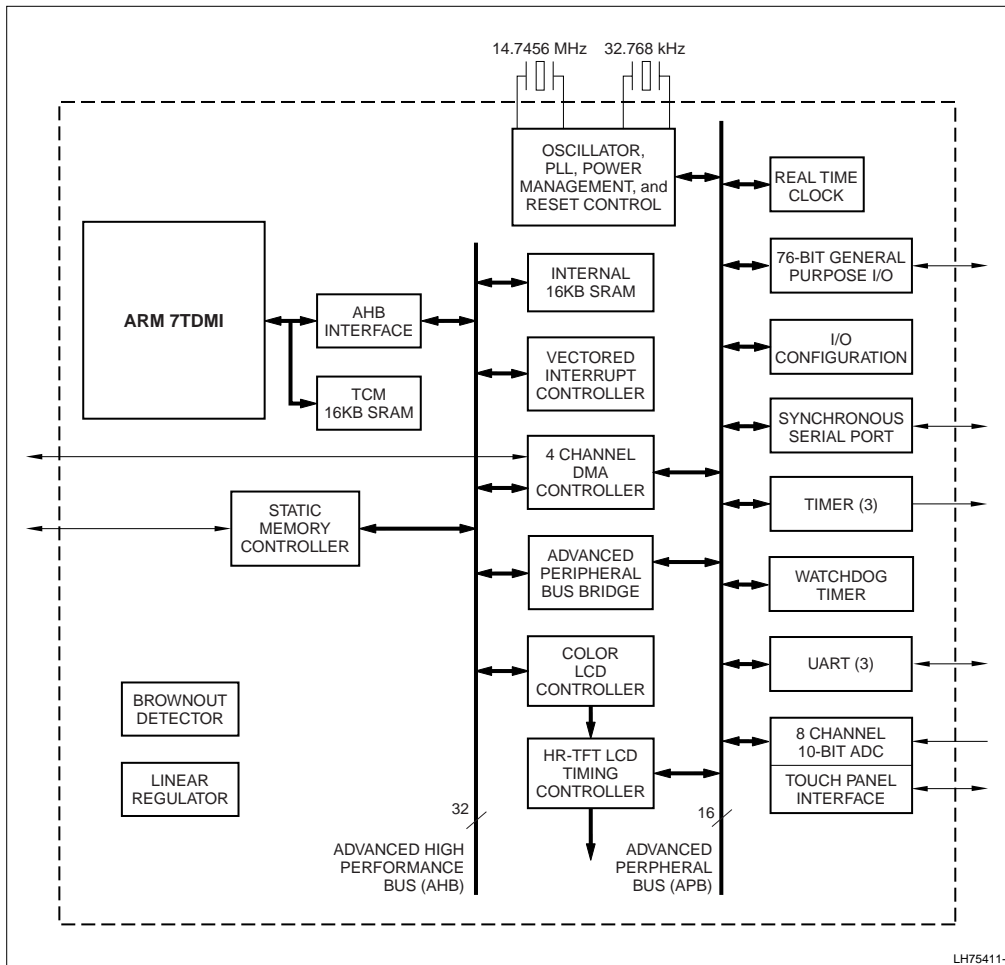


LH75411-2

PRELIMINARY PRODUCT INFORMATION

SHARP

LH75411 BLOCK DIAGRAM



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