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APPLICATIONS:
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Security

LH75411 16/32-bit Microcontroller with Color LCD Controller

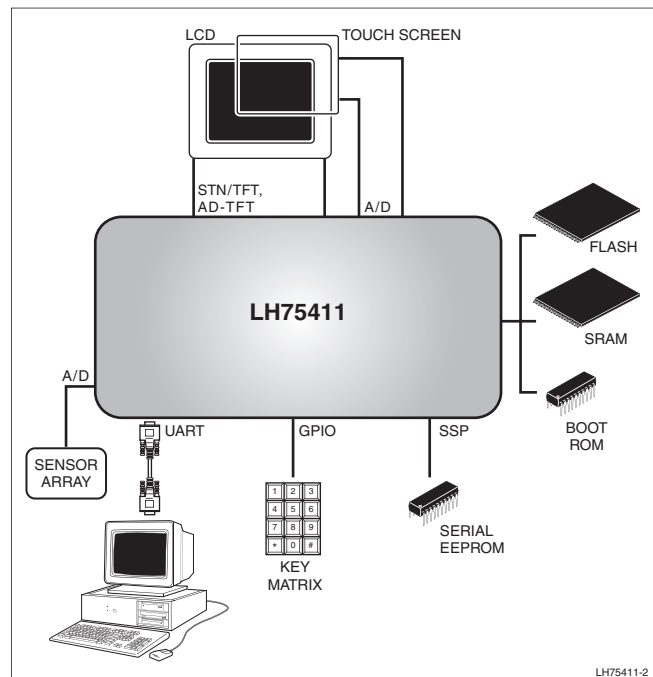
FEATURES

- ARM7TDMI-S™ Core
- High Performance (Up to 90 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, Stop1, Stop2
- Color and Grayscale LCD Controller
 - 12-bit (4,096) Direct Mode Color
 - Up to VGA (640 × 480)
 - 8-bit (256) Direct or Palletized Color
 - Up to SVGA (800 × 600)
 - 4-bit (16) Direct Mode Color/Grayscale
 - Up to XGA (1,204 × 768)
 - Supports STN, TFT, HR-TFT, AD-TFT Displays
- Eight Channel, 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-S 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 4,096 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 90 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

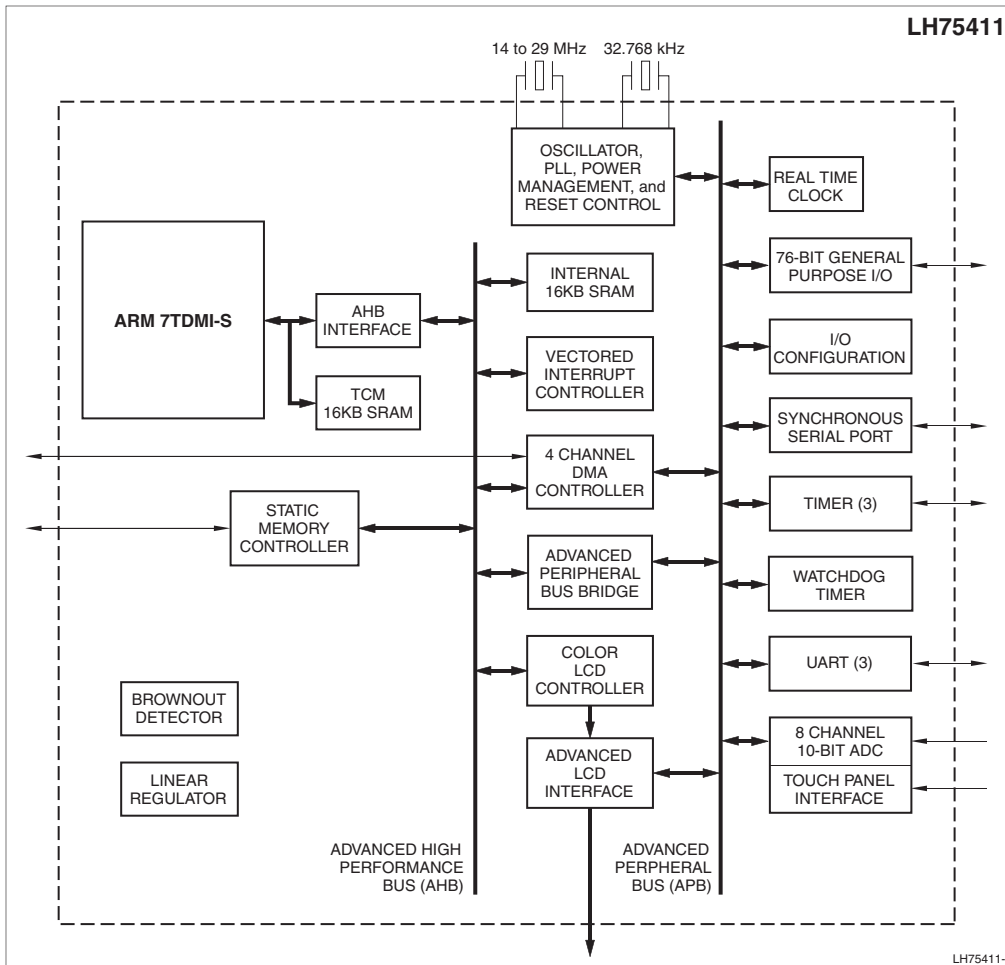


LH75411-2

PRODUCT INFORMATION

SHARP

LH75411 BLOCK DIAGRAM



SHARP[®]

MICROELECTRONICS OF THE AMERICAS

Regional Sales Offices

North American Headquarters

Camas, WA
Ph (360) 834-2500
Fax (360) 834-8903

West

Huntington Beach, CA
Ph (714) 903-4600
Fax (714) 903-0295
San Diego, CA
Ph (858) 597-0982
Fax (858) 597-8701
San Jose, CA
Ph (408) 436-4900
Fax (408) 436-0924

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Fax (954) 267-0254
Burlington, MA
Ph (781) 270-7979
Fax (781) 229-9117
Carey, NC
Ph (919) 460-0695
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Fax (412) 381-1192
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Ph (215) 321-5530
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Fax (248) 391-6165
Austin, TX
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Fax (512) 349-7002
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Fax (972) 580-7537
Houston, TX
Ph (281) 955-9909
Fax (281) 955-9910
Muskego, WI
Ph (414) 529-9568
Fax (414) 529-9569

Europe

SHARP Microelectronics
Europe
Hamburg, Germany
Ph (49) 40-2376-2286
Fax (49) 40-2376-2232

Asia

SHARP Corporation
Osaka, Japan
Ph (81) 6-6621-1221
Fax (81) 6117-725300

Product Information: 1-800-642-0261

World Wide Website: <http://www.sharpsma.com>

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