Welcome to <u>E-XFL.COM</u>

Understanding <u>Embedded - Microcontroller, Microprocessor, FPGA Modules</u>

Embedded - Microcontroller, Microprocessor, and FPGA Modules are fundamental components in modern electronic systems, offering a wide range of functionalities and capabilities. Microcontrollers are compact integrated circuits designed to execute specific control tasks within an embedded system. They typically include a processor, memory, and input/output peripherals on a single chip. Microprocessors, on the other hand, are more powerful processing units used in complex computing tasks, often requiring external memory and peripherals. FPGAs (Field Programmable Gate Arrays) are highly flexible devices that can be configured by the user to perform specific logic functions, making them invaluable in applications requiring customization and adaptability.

Applications of <u>Embedded - Microcontroller,</u>

Details	
Product Status	Obsolete
Module/Board Type	MPU Core
Core Processor	ARM922T, LH7A404
Co-Processor	-
Speed	200MHz
Flash Size	32MB
RAM Size	64MB
Connector Type	SO-DIMM-144
Size / Dimension	2.37" x 2.67" (60.2mm x 67.8mm)
Operating Temperature	-40°C ~ 85°C
Purchase URL	https://www.e-xfl.com/product-detail/logic-pd/cenglh7a404-11-504hi

A · **B** · **C**
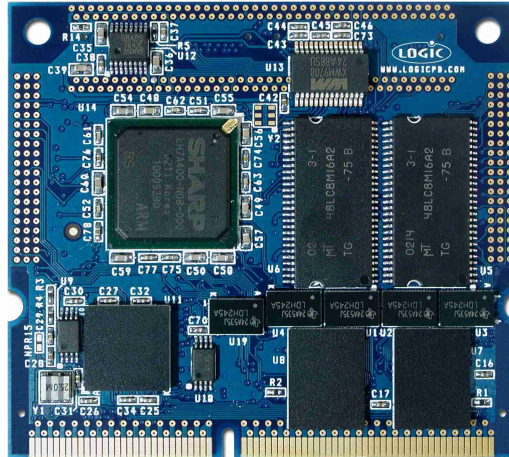
LH7A404 CARD ENGINE

(PRELIMINARY)

The LH7A404 Card Engine is a compact, product-ready hardware and software solution for developing embedded products with **less time, less cost, less risk ... more innovation.**

The LH7A404 Card Engine is a complete embedded computing module offering essential features for handheld and embedded networking applications in the industrial, consumer and medical markets. The use of custom peripheral boards makes the Card Engine the ideal foundation for OEMs developing handheld and compact products. The Card Engine provides a common reference pin-out on its expansion connectors, which enables customers to easily scale to next generation micro controller Card Engines when new functionality or performance is required.
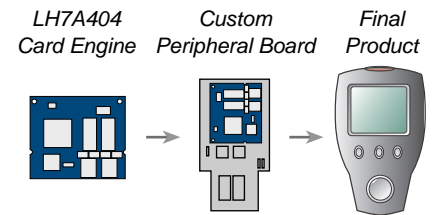
Developing products is as simple as

A **B** **C**

A Application Development Kits
B Board Support Packages
C Card Engines

LH7A404 Card Engine → *Custom Peripheral Board* → *Final Product*

Actual Size (2.37" x 2.67")

SOFTWARE HIGHLIGHTS

- Ready to run Windows™ CE or Linux BSPs
- Bootloader/Monitor
- Board Support Packages
- Custom Linux or Windows™ CE device driver development

CUSTOMER SUPPORT

Logic provides technical support for Card Engines. Various support packages are available; contact us for more information.

- **Processor** Sharp LH7A404 32 bit ARM922TDMI RISC microprocessor
  - Running up to 200 MHz (0 to 70 Degrees C) with 100 MHz bus speed
  - Running up to 166 MHZ (-40 to 85 Degrees C) with 83 MHz bus speed
- **SDRAM Memory** 32 or 64 Mbytes on board
- **Flash Memory** Up to 32 Mbytes on board
- **Display** Programmable color LCD controller
  - Built in driver supports up to 1024 x 768 x 16 bit color
  - Supports STN, Color STN, HR-TFT, AD-TFT, TFT
- **Touch Screen** Four or Five wire integrated touch interface
- **Network Support** 10/100 BASE-T Ethernet controller (application/debug)
  - SMSC LAN 91C111 (MAC & PHY)
- **Audio** Audio Codec AC97 (Wolfson WM9708)
- **PC Card Expansion**
  - Compact Flash Type 1 card (memory storage only)   - Smart Card Interface (ISO7816)
  - Dual PCMCIA interface + 1 memory mode CF   - MMC
- **USB** USB host and 1 device interface (USB 1.1)
- **Serial Ports** 3 X 16C550 like, standard UARTS
- **IrDA** SIR supports up to 115.2 Kbps
- **PS2** PS2 Keyboard & Mouse
- **GPIO** Programmable depending on peripheral requirements
- **SSP** Supports either Motorola SPI™, National Semiconductor MICROWIRE™, TI SSI
- **Software**
  - Windows™ CE and Linux BSPs available   - LogicLoader™ (bootloader/monitor)
- **Mechanical**
  - Compact Size: 2.37" (60.2 mm) long x 2.67" (67.8 mm) wide x 0.17" (4.4 mm) high
  - 144 pin SODIMM Connector for connection to custom peripheral board
  - Two high density 80-pin expansion connectors for peripheral access
- **Application Development Kits**
  - Zoom™ Starter Development Kit   - Zoom™ Integrated Development Kit (Avail. Soon)

SHARP

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APPLICATION DEVELOPMENT KITS | BSPS & SOFTWARE | CARD ENGINES | PRODUCT DEVELOPMENT SERVICES