

**PRODUCT BRIEF:**

Logic :: NXP

## LH7A404 CARD ENGINE System on Module

The LH7A404 Card Engine is a compact, product-ready hardware and software solution that fast forwards your embedded product design.

The LH7A404 Card Engine is a complete System on Module (SOM) that offers essential features for handheld and embedded networking applications. Use of custom baseboards 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 easy scalability to next generation microprocessor Card Engines when new functionality or performance is required.

Application development is performed right on the product-ready LH7A404 Card Engine and software Board Support Packages (BSPs), which enables you to seamlessly transfer your application code and hardware into production.

The LH7A404 Card Engine is ideal for applications in the medical, point-of-sale, industrial, and security markets. From patient



LH7A404 CARD ENGINE

monitoring and medical imaging, to card payment terminals and bar code readers, to CCTV cameras and intruder alarms, the LH7A404 Card Engine allows for powerful versatility and long-life products.

**LH7A404 CARD ENGINE :: HIGHLIGHTS:**

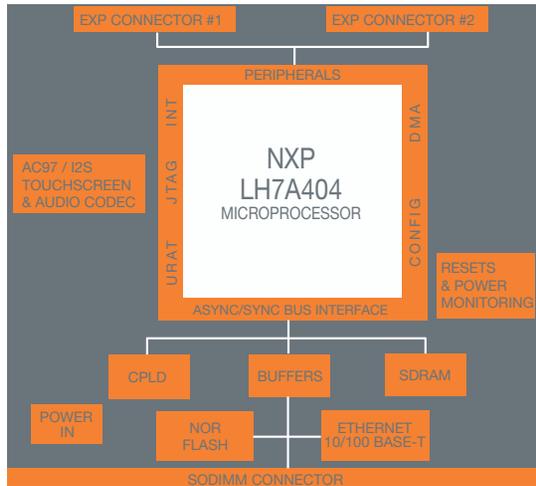
- +Product-ready System on Module with the NXP LH7A404 microprocessor running up to 200 MHz
- +Compact form factor—Card Engine 60.2 x 67.8 x 4.4 mm
- +Long product life-cycle
- +0°C to 70°C (commercial temp) or -40°C to 85°C (industrial temp)
- +RoHS compliant

**LH7A404 ZOOM™ SDK :: FEATURES:**

- +Application baseboard
- +LH7A404 Card Engine (CENGLH7A404-11-503HCR)
- +Necessary accessories to immediately get up and running
- +Kit available from Logic (SDK-LH7A404-11-6416R)
- +See Zoom™ SDK product brief for more information



## LH7A404 Card Engine Block Diagram



## LH7A404 Card Engine Ordering Information

| Logic Model Number    | Speed (MHz) | SDRAM (MB) | NAND Flash (MB) | NOR Flash (MB) | Touch | Audio | Ethernet | Temp (°C) |
|-----------------------|-------------|------------|-----------------|----------------|-------|-------|----------|-----------|
| CENGLH7A404-11-503HCR | 200         | 64         | 0               | 16             | Y     | Y     | Y        | 0 – 70    |
| CENGLH7A404-11-504HCR | 200         | 64         | 0               | 32             | Y     | Y     | Y        | 0 – 70    |
| CENGLH7A404-11-504HIR | 200         | 64         | 0               | 32             | Y     | Y     | Y        | -40 – 85  |

## LH7A404 ZOOM™ SDK Ordering Information

| Logic Model Number   | SOM Configuration     | Recommended Resale |
|----------------------|-----------------------|--------------------|
| SDK-LH7A404-11-6416R | CENGLH7A404-11-503HCR | \$399              |

### LOGIC WEBSITE :: DESIGN RESOURCES:

- + Logic Technical Support : <http://www.logicpd.com/support/>
- + Technical Discussion Group : <http://www.logicpd.com/support/tdg/>
- + Frequently Asked Questions (FAQ) : <http://www.logicpd.com/support/faq/>
- + For more information contact Logic Sales : [product.sales@logicpd.com](mailto:product.sales@logicpd.com)



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## Product Features

### Processor

- +NXP ARM 922TDMI LH7A404 microprocessor running up to 200 MHz

### SDRAM Memory

- +64 MB SDRAM standard

### Flash Memory

- +16 or 32 MB NOR

### Display

- +Programmable color LCD controller
- +Built-in driver supports up to 1024x768 with 8-bit LCD interface

### Touch Screen

- +Integrated 4-wire touch screen controller

### Network Support

- +10/100 Base-T Ethernet controller for application/debug (SMSC LAN 91C111)

### Audio

- +AC97 audio codec

### PC Card Expansion

- +CompactFlash Type I card (memory-mapped mode only)
- +Smart Card, MMC/SD, dual PCMCIA interfaces

### USB

- +Two USB 2.0 full-speed host interfaces
- +One USB 2.0 full-speed device interface

### Serial Ports

- +Three 16C550 compatible UARTs

### SSP

- +Supports Motorola SPI, National Semiconductor MICROWIRE, TI SSI

### GPIO

- +Programmable I/O depending on peripheral requirements

### Software

- +LogicLoader™ (bootloader/monitor)
- +Windows CE 5.0 BSP

### Mechanical

- +60.2 mm wide x 67.8 mm long x 4.4 mm high

### RoHS Compliant