

# LH75401 CARD ENGINE





(PRELIMINARY)

Developing embedded solutions is as simple as









B Board Support Packages

C Card Engines

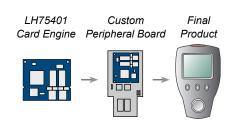
CAN Ready

screen controller

The LH75401 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 LH75401 Card Engine is a complete single board computer 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. 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.





Actual Size (2.37" x 2.67")

- Processor Sharp LH75401 16/32 bit ARM7TDMI RISC microprocessor running up to 51.6 MHz
- SRAM Memory Up to 2 Mbytes
- Flash Memory Up to 16 Mbytes on board
- Display Programmable color LCD controller
  - Built in driver supports up to 320 x 240 (QVGA) x 12 bit color
  - Supports STN, Color STN, HR-TFT, AD-TFT, TFT
- Touch Screen Processor integrated four or five wire resistive touch screen controller
- **Network Support** 10/100 BASE-T Ethernet controller (application/debug)
  - SMSC LAN 91C111 (MAC & PHY)
- Audio Audio Codec Stereo Output (TI TLV320DAC23)
- PC Card Expansion Compact Flash Type 1 card (memory storage only)
- Serial Ports 3 X UARTS
  - 2 X 16C550 like, standard UARTS
  - 1 CAN Version 2.0b or 1 82510 UART
- SSP Supports either Motorola SPI™, National Semiconductor MICROWIRE™, TI SSI
- **GPIO** Programmable depending on peripheral requirements
- Software
  - LogicLoader™ (bootloader/monitor) in executable format
- 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 available Q1 '03
  - Zoom™ Integrated Development Kit available Q2 '03

STRATEGIC PARTNER

HARDWARE HIGHLIGHTS

Processor integrated touch

5 Capture/Compare Timers,2 Capture Timers





APPLICATION DEVELOPMENT KITS

**BSPS & SOFTWARE** 

**CARD ENGINES** 

PRODUCT DEVELOPMENT SERVICES



# Zoom STARTER DEVELOPMENT KIT

(PRELIMINARY)

Integrated

LCD/Touch/Inverter

Connector

The Zoom™ Starter Development Kit is a low-cost Application Development Kit for evaluating the functionality of the Card Engine. This results in an embedded product development cycle with Less time, less cost, less risk ... More innovation.

Application development is performed right on the product-ready Card Engine and software Board Support Package included in the kit, which enables customers to seamlessly transfer their application code and hardware into production. The Application Board has connections to all of the Card Engine specific peripherals via standard connectors or expansion headers. This allows easy connection for application development, prototyping, and debugging.

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### SHARP DISPLAY KITS

(bezel, inverter, touch panel, and cable assemblies included):

- LQ035Q7DB02
- LQ64D343
- LQ121S1DG31

Cable assemblies are also available for other Sharp displays.

Logic offers the following display kits

- 3.5", QVGA, A-TFT
- 6.4", VGA, TFT
- 12.1", SVGA, TFT

## **CUSTOMER SUPPORT**

Logic provides technical support for Application Development Kits, Various support packages are available; contact us for more information.

### CONTACT

For more information on our embedded platform solutions, please contact Logic Sales at www.logicpd.com or 612.672.9495

### STRATEGIC PARTNER





APPLICATION DEVELOPMENT KITS

Card Engine LH75401 Card Engine included

- LCD Display Connector 60 pin integrated LCD, touch & backlight connector (see Sharp Display Kits sidebar for ready-to-use LCD display options)
- Network Support One RJ45 Ethernet jack with magnetics (application/debug)

Expansion Headers: Access to all Card Engine signals Standard 100-mil pitch for prototyping

- Audio Stereo input and output jacks 3.5mm diameter (stereo in not supported by LH75401)
- PC Card Expansion Compact Flash Type 1 (card slot memory storage only)
- Serial Port 115.2Kbps RS-232 debug serial port
- Expansion Headers
  - Standard 100 mil pitch header
  - Access to all Card Engine signals
- Software
  - LogicLoader™ (bootloader/monitor) in executable format
- Mechanical
  - 4"(102 mm) long x 6"(152 mm) wide x .66"(16.8 mm) high
- Cables
  - Serial cable (null modem)
  - Power supply and power adapters (UK, Europe, Japan, and USA)
- Model Number SDK-LH75401-10

**BSPS & SOFTWARE CARD ENGINES** 

PRODUCT DEVELOPMENT SERVICES

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