

PRODUCT BRIEF:  
Logic :: Renesas

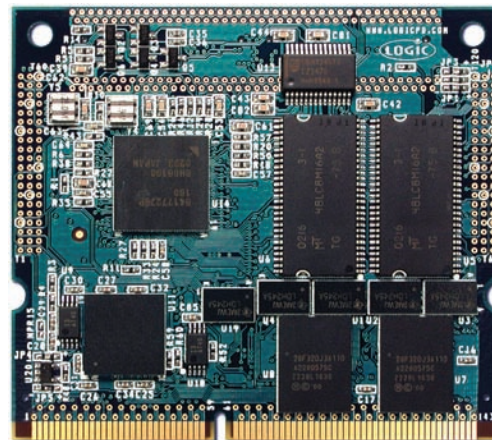
## SH7727 CARD ENGINE System on Module

The SH7727 Card Engine is a compact, product-ready hardware and software solution that fast forwards your embedded product design.

The SH7727 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 SH7727 Card Engine and software Board Support Packages (BSPs), which enables you to seamlessly transfer your application code and hardware into production.

The SH7727 Card Engine is ideal for applications in the medical, point-of-sale, industrial, and security markets. From patient



SH7727 CARD ENGINE

monitoring and medical imaging, to card payment terminals and bar code readers, to CCTV cameras and intruder alarms, the SH7727 Card Engine allows for powerful versatility and long-life products.

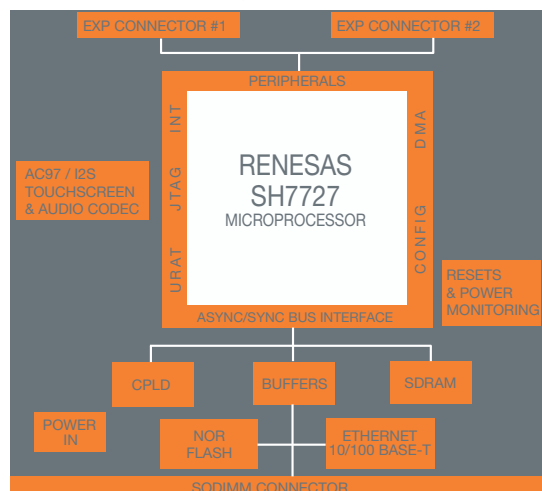
### SH7727 CARD ENGINE :: HIGHLIGHTS:

- + Product-ready System on Module with the Renesas SH7727 microprocessor running at 156 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)

### SH7727 ZOOM™ SDK :: FEATURES:

- + Application baseboard
- + SH7727 Card Engine
- + Necessary accessories to immediately get up and running
- + Kit available from Logic (SDK-SH7727-20)
- + See Zoom™ SDK product brief for more information

## SH7727 Card Engine Block Diagram



## SH7727 Card Engine Ordering Information

Logic Model Number	Speed (MHz)	SDRAM (MB)	NAND Flash (MB)	NOR Flash (MB)	Touch	Audio	Ethernet	Temp (°C)
CENGSH7727-20-403HC <sup>1</sup>	156	32	0	16	Y	Y	Y	0 – 70

1. The SH7727 Card Engine is not available as a standard product. To receive information about custom configurations, please contact Logic's distributors.

## SH7727 ZOOM™ SDK Ordering Information

Logic Model Number	SOM Configuration	Recommended Resale
SDK-SH7727-20	CENGSH7727-20-403HC	\$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

- + Renesas SH3-DSP 32-bit SH7727 microprocessor running at 156 MHz

### SDRAM Memory

- + 32 MB SDRAM standard

### Flash Memory

- + 16 MB NOR

### Display

- + Programmable color LCD controller
- + Built-in driver supports up to 1024 x 768 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, dual PCMCIA interfaces

### USB

- + Choice of two USB 1.1 full-speed host interfaces or one host interface and one device interface

### Serial Ports

- + Three serial interfaces (UART, SSP/SPI, SIOF)

### GPIO

- + Programmable I/O depending on peripheral requirements

### Software

- + LogicLoader™ (bootloader/monitor)
- + Windows CE 4.2 BSP

### Mechanical

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

