

**PRODUCT BRIEF:**

Logic :: Renesas

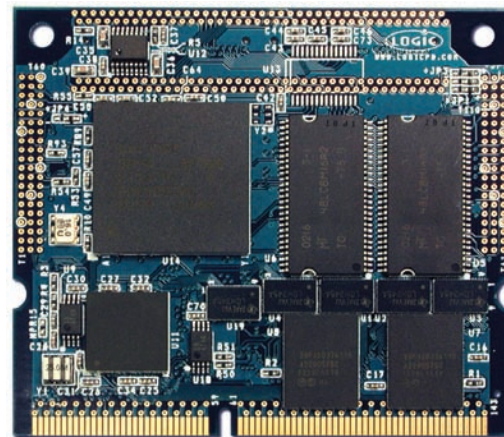
## SH7760 CARD ENGINE System on Module

**The SH7760 Card Engine is a compact, product-ready hardware and software solution that fast forwards your embedded product design.**

The SH7760 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 SH7760 Card Engine and software Board Support Packages (BSPs), which enables you to seamlessly transfer your application code and hardware into production.

The SH7760 Card Engine is ideal for applications in the medical, point-of-sale, industrial, and security markets. From patient



SH7760 CARD ENGINE

monitoring and medical imaging, to card payment terminals and bar code readers, to CCTV cameras and intruder alarms, the SH7760 Card Engine allows for powerful versatility and long-life products.

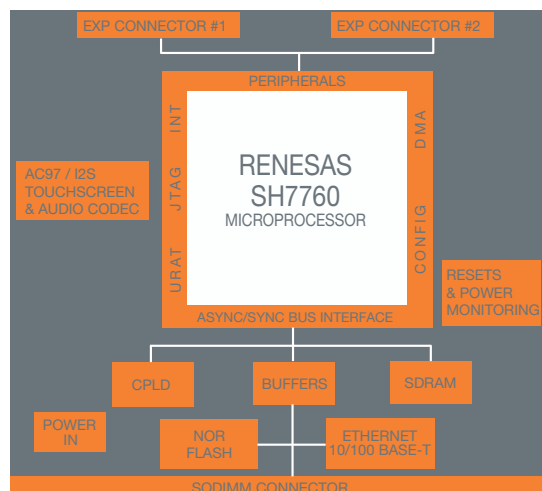
**SH7760 CARD ENGINE ::  
HIGHLIGHTS:**

- +Product-ready System on Module with the Renesas SH7760 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)
- +RoHS compliant

**SH7760 ZOOM™ SDK ::  
FEATURES:**

- +Application baseboard
- +SH7760 Card Engine (CENGSH7760-10-503HC)
- +Necessary accessories to immediately get up and running
- +Kit available from Logic (SDK-SH7760-10-6416)
- +See Zoom™ SDK product brief for more information

## SH7760 Card Engine Block Diagram



## SH7760 Card Engine Ordering Information

Logic Model Number	Speed (MHz)	SDRAM (MB)	NAND Flash (MB)	NOR Flash (MB)	Touch	Audio	Ethernet	Temp (°C)
CENGSH7760-10-503HC <sup>1</sup>	200	64	0	16	Y	Y	Y	0 – 70
CENGSH7760-10-504HCR	200	64	0	32	Y	Y	Y	0 – 70

1. This non-RoHS configuration is only available as part of the SH7760 Zoom SDK.  
For production volumes, please use the RoHS compliant configuration.

## SH7760 ZOOM™ SDK Ordering Information

Logic Model Number	SOM Configuration	Recommended Resale
SDK-SH7760-10-6416 <sup>1</sup>	CENGSH7760-10-503HC <sup>1</sup>	\$449

1. This is a non-RoHS configuration.

### 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)



embedded product solutions

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## Product Features

### Processor

- + Renesas SH4 32-bit SH7760 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 640 x 480 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)
- + Dual PCMCIA interfaces

### USB

- + One USB 1.1 full-speed host interface

### Serial Ports

- + Three 16C550 compatible UARTs
- + Two CAN 2.0 interfaces

### Timers/Counters

- + Four channels

### SPI

- + Supports Motorola SPI

### GPIO

- + Programmable I/O depending on peripheral requirements

### Software

- + LogicLoader™ (bootloader/monitor)
- + Windows CE 4.2 & 5.0 BSP

### Mechanical

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

### RoHS Compliant