

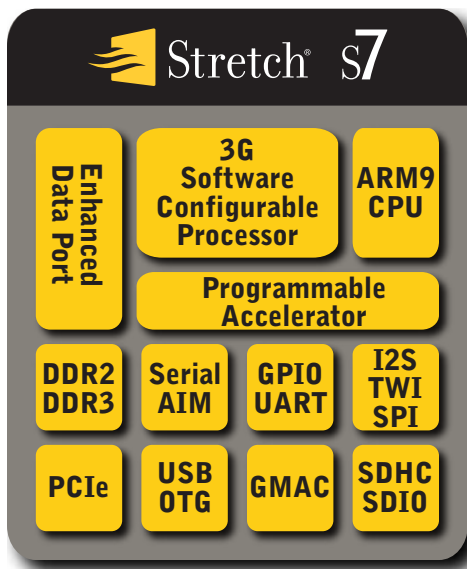


# Stretch S7000 Family of Software Configurable Processors

*Setting New Standards for the Surveillance Industry*

Stretch S7000 processors use third-generation software configurable processor (SCP) technology to deliver unprecedented compute capability to demanding video applications. S7000 processors are highly integrated and include a rich complement of I/O interfaces, reducing the need for external devices and resulting in dramatically reduced system bills of materials. Video surveillance systems designed using Stretch S7000 processors provide the lowest cost-per-channel solutions in the industry.




The Stretch S7000 family of software configurable processors is characterized by its compute power and scalability. A single S7100 processor combined with the highly optimized Stretch High Profile multi-stream H.264 CODEC can compress up to 16 channels of full D1 video to deliver the surveillance industry's best video quality. The enhanced serial AIM interface provides seamless connectivity between S7000 processors, enabling customers to design portfolios of products that scale in compute complexity to meet a variety of application requirements.



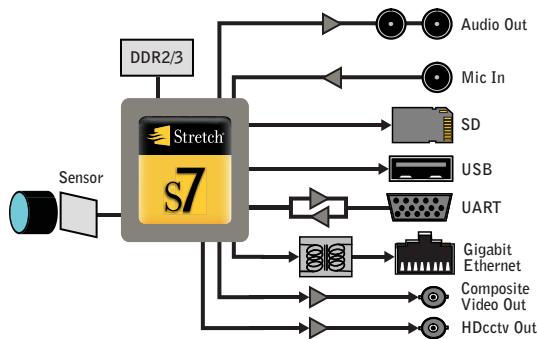
## S7000 FAMILY KEY FEATURES

- Highly Optimized Video Processing  
Third Generation SCP and Programmable Accelerator provide acceleration of application code and commonly used video processing algorithms
- Seamless Connectivity  
Enhanced data port for glueless connectivity to image sensors, analog video, HDMI, and SDI devices  
PCI Express for SATA and host processor connectivity
- ARM9 CPU  
Embedded ARM9 processor for running Linux and host application code, including PSIA and ONVIF support
- Scalability  
Serial Array Interface Module (AIM) for scalability of S7000 devices
- Rich I/O Interfaces  
Integrated USB and SD interfaces reduce the need for additional external components
- Low Power  
Low power 65nm technology

The Stretch S7000 family of software configurable processors can enable a wide range of video surveillance products. From high definition IP cameras and multi-channel DVRs to cost-efficient video streamers, Stretch S7000 processors provide the power and flexibility today's demanding surveillance applications require.

	<b>S7100</b> 	<b>S7110</b> 	<b>S7120</b> 
<b>Package</b>	23x23 FCBGA	17x17 FBGA	14x14 FBGA
<b>Max. Clock Frequency</b>	400MHz	333MHz	300MHz
<b>DDR3 width/data rate</b>	32 bits/1067	32 bits/800	16 bits/800
<b>Video Compression Performance</b>	1080p60 H.264 SVC/AVC 16 Channels D1 H.264 SVC/AVC	1080p60 H.264 SVC/AVC 12 Channels D1 H.264 SVC/AVC	1080p30 H.264 SVC/AVC 6 Channels D1 H.264 SVC/AVC
<b>PCIe Lanes</b>	4	2	0
<b>Ethernet</b>	1 Gigabit	1 Gigabit	1 Gigabit
<b>Data Ports</b>	4x 10-bit (cascadable)	1x 14-bit, 2x 8-bit	1x 14-bit, 1x 8-bit
<b>Peripherals</b>	SDHC, SDIO, USB	SDHC, SDIO, USB	SDHC, SDIO
<b>Serial AIM</b>	4 Channels	2 Channels	N/A

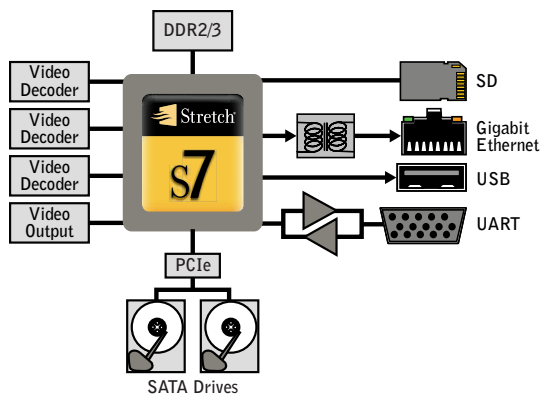
The low power consumption and high compute performance of S7000 processors make them the ideal choice for IP camera applications. Single-chip implementations featuring Wide Dynamic Range (WDR) Image Signal Processing (ISP), multi-stream H.264 compression and embedded video analytics lead the industry in performance and video quality.



### S7 IN IP CAMERAS

- HD Wide Dynamic Range Image Signal Processing
- 1080p60 H.264 Multi-stream Encode
- Surveillance Industry's Best Video Quality
- Multi-CODEC Support
- Embedded Analytics
- Low Power Consumption

DVR designs featuring S7000 processors have the lowest cost per channel in the industry. Highly optimized video processing and state-of-the-art CODEC technology deliver the industry's best video quality. An embedded ARM9 processor removes the need for an external host controller, simplifying designs and driving down system costs.



### S7 IN DIGITAL VIDEO RECORDERS

- High Channel Density  
16 Channels D1 H.264 High Profile Encode
- Surveillance Industry's Best Video Quality
- Low Bills of Materials  
Rich I/O and Enhanced Data Port  
Integrated ARM Processor
- System Scalability

