Stretch®

Stretch S7 Camera

Reference Design Kits

ONVIF
Driving IP-based physical security through global standardization

PSIA

HD cctv member™

Stretch S7

Stretch S7 Camera Reference Design Kits

Stretch S7000 series camera reference design kits feature Stretch software configurable processors and are available in a selection of resolution and output options. These single-chip designs feature state-of-the-art technology for ultimate video quality and are available with either internet protocol (IP) or HDcctv outputs.

Powerful and flexible ISP

Stretch S7000 series camera kits use an integrated Image Signal Processing (ISP) engine to process raw image data from the sensor and to perform a wide array of algorithms, including Color Filter Array (CFA) interpolation, defective pixel and black level correction, Wide Dynamic Range (WDR) tone mapping, color and gamma correction, and image enhancement. To optimize the camera settings for the best possible image, the ISP also provides control for automatic exposure, focus, and white balance. All parameters of the ISP can be controlled through a rich API, and elements can be replaced with customer-specific algorithms when required. The Stretch ISP removes the need for a separate ISP device, so total system costs are reduced.

Industry's best video quality and lowest bit rates

Stretch IP camera reference design kits include the Stretch Intelligent Encoder and the highly efficient H.264 High Profile CODEC. This CODEC, combined with the advanced image processing of the Stretch ISP, provides the industry's best image quality and lowest compressed bit rates, reducing both bandwidth and storage requirements. Stretch IPCAM7100 and IPCAM7120 reference designs can also perform video compression using the Stretch H.264 Scalable Video CODEC (SVC), providing ultimate scalability and stream management capabilities.

The Stretch HDCCTVCAM outputs pristine quality high definition 1920 x 1080 progressive scan video at 30 frames per second over an HDcctv-compatible interface. The result is low latency, high quality video in a platform that is easy to deploy using existing installed infrastructure.

The integrated ARM9 processor in Stretch S7000 family devices can be used to run the supplied camera application and port third-party applications.

Range of video output options

Reference designs are available as either Evaluation (EVK) or full Reference Design (RDK) Kits. EVKs are intended for evaluation purposes and produce watermarked streams. RDKs can be used as the basis for highly differentiated derivative designs and include hardware design files and a distribution license for all supplied software. Both kits contain a full software load, a sample host application, and source code for the included software (the Stretch Intelligent Encoder is supplied as object code).

Key Features

- Broad range of video resolutions
- Powerful and flexible ISP
- H.264 High Profile encoding
- Low latency HDcctv video output

Key Benefits

- Industry's best video quality
- Low bandwidth and storage requirements
- PSIA, ONVIF, and HDcctv compatibility

Ordering Codes	Maximum Resolution at Full Frame Rate	Interface Options	Encoding Capability	Control Protocols
EVK-IPCAM7100 RDK-IPCAM7100	1080p60 5MP	Ethernet, CVBS Analog Monitor, HDcctv Local Monitor	H.264 High Profile, H.264 Scalable Video CODEC, MPEG4	PSIA and ONVIF
EVK-IPCAM7110 RDK-IPCAM7110	1080p60 4MP	Ethernet, CVBS Analog Monitor	H.264 High Profile, MPEG4	PSIA and ONVIF
EVK-IPCAM7120 RDK-IPCAM7120	1080p30 720p60	Ethernet, CVBS Analog Monitor	H.264 High Profile, H.264 Scalable Video CODEC, MPEG4	PSIA and ONVIF
EVK-HDCCTVCAM RDK-HDCCTVCAM	1080p30	HDcctv	None	HDcctv

Stretch Incorporated
1322 Orleans Drive
Sunnyvale, CA 94089 USA
Tel: 408-543-2700 Fax: 408-747-5736
sales@stretchinc.com