Stretch®

Stretch IP Camera
Reference Design Kits

IPCAM7100

IPCAM7120

ONVIF
Driving IP-based physical security through global standardization

PSIA

HD cctv™
member

Stretch®
S7

Stretch IP Camera Reference Design Kits

Stretch high definition IP camera reference designs feature Stretch S7100 and S7120 software configurable processors. Using the Stretch H.264 High Profile CODEC, the IPCAM7100 can produce streams up to 1080p60 and the IPCAM7120 produces steams up to 1080p30. Both cameras are supplied with a 1080p30 sensor and megapixel lens, and are compatible with multiple third-party sensors without additional glue logic.

Powerful and flexible ISP

Stretch S7000 series IP camera kits use an integrated Image Signal Processor (ISP) engine to process raw image data from the sensor and to perform a wide array of algorithms including Color Filter Array (CFA) correction, defective pixel and black level correction, Wide Dynamic Range (WDR) tone mapping, and color and gamma correction, as well as 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 ASIC, reducing system costs.

Industry's best video quality and lowest bit rates

Both IP camera kits feature 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.

The IPCAM7100 and IPCAM7120 reference designs can also perform video compression using the Stretch H.264 Scalable Video CODEC (SVC), giving operators the ultimate in stream management and scalability.

All Stretch IP camera designs provide for local SD card storage and the IPCAM7100 is supplied with two daughter cards that can be used for either analog CVBS or high definition HDcctv spot monitor output. They are ONVIF and PSIA compatible and can be configured using industry-standard clients over the included gigabit Ethernet interface.

PSIA and ONVIF compatible

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 and CODECs are supplied as object code).

Key Features
- 1080p60 capable (1080p30 for the IPCAM7120)
- Powerful and flexible ISP
- H.264 High Profile encoding
- Local storage and video output

Key Benefits
- Industry's best video quality
- Low bandwidth and storage requirements
- ONVIF and PSIA compatible

Part Numbers

Evaluation Kit
- EVK-IPCAM7100
- EVK-IPCAM7120

Full Reference Design Kit – Includes everything in an EVK, plus a non-watermarked version of the Stretch Intelligent Encoder and a distribution license for all included CODECs
- RDK-IPCAM7100
- RDK-IPCAM7120