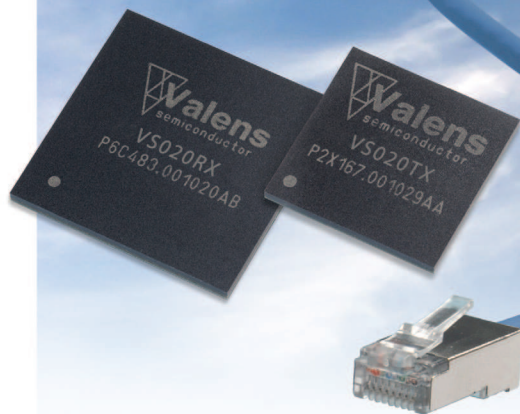


CCTV by Valens –
The Next Generation of Video
Surveillance. Cost Effective,
Uncompressed HD Video
Over CATx Cable



Features

- **Uncompressed digital CCTV over Cat (CCTVoC)**
- **All-in-One Connectivity – simultaneous distribution of:**
 - Uncompressed high definition (HD) video: up to 1080p@30fps (1080p@60fps with generic TMDS source)
 - High-quality audio
 - Up to 100W (PoE/PoE+/PoH)
 - Control signals including RS232, RS485 and CIR
- **Up to 3 Gbps video traffic**
- **Outstanding cable range of 150 meters over cat5e/6a cable**
- **Maximum traffic latency of 10usec over 100m cat5e/6a cable**
- **Interoperable with Valens VS100 family**
- **Pin compatible to Valens VS100**
- **Optional HDMI bypass on TX chip**
- **CISPR/FCC Class B EMC/EMI compliance**
- **Power:**
 - 1V, 1.8V and 3.3V
 - 5V tolerant IOs
- **196-pin LPGA, 15mm x 15mm**
- **0°C to 70°C operating temperature**
- **RoHS and Green compliant**

Applications

- **Surveillance HD cameras**
- **PTZ cameras**
- **Night vision cameras**
- **Thermal cameras**
- **DVR equipment**
- **NVR equipment for hybrid solutions**
- **Video surveillance monitors**
- **Machine vision**

Overview

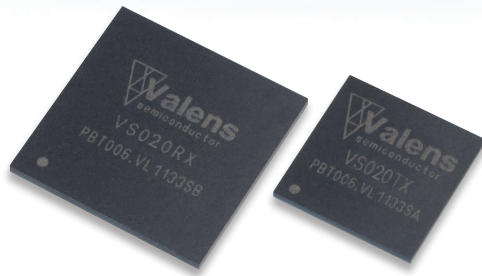
The Valens VS020™ chipset, based on Valens unique HDBaseT technology, is a comprehensive tailored solution for uncompressed digital CCTV over Cat. The VS020 enables the convergence of uncompressed HD video, audio, power and control signals over a standard 150m cat5e/cat6a cable. Valens innovative solution for CCTV provides camera and DVR manufacturers, system integrators and end customers with the following benefits:

- Best of breed video quality
- Low system costs
- Simple installation
- Scalable infrastructure

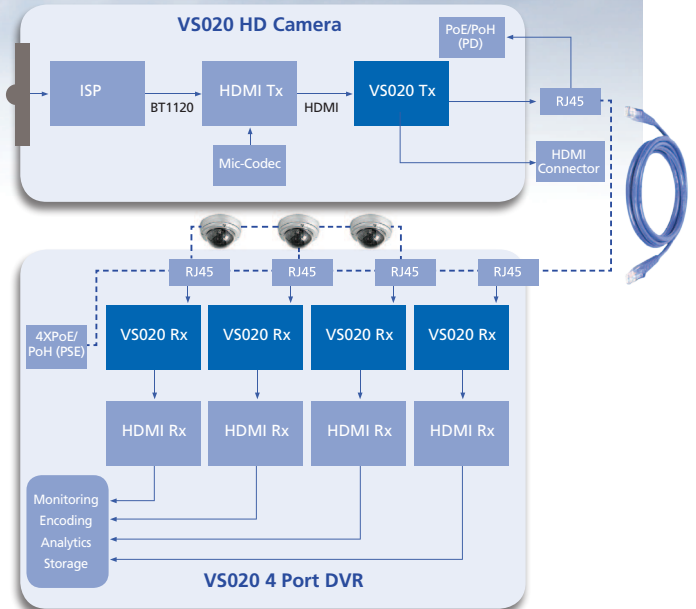
With the increasing demand for digital, high resolution cameras, Valens VS020 enables a simple, fast and cost effective transition to digital CCTV.

The VS020 family consists of two chips:

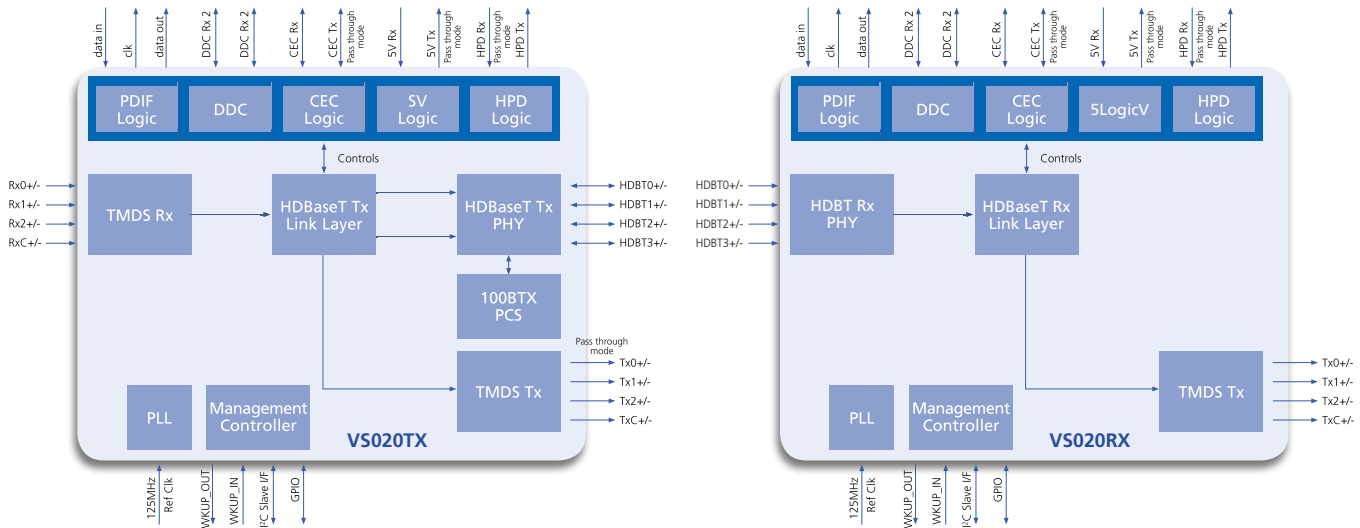
- **VS020TX:** Transmitter designed for HD camera equipment.
- **VS020RX:** Receiver designed for monitors, DVR-s and other display equipment.



Example for System Functional Diagram



VS020TX and VS020RX High-level Block Diagrams



About Valens

Valens Semiconductor is a leading provider of semiconductor products for the distribution of uncompressed HD multimedia content. The company invented HDBaseT™, the first technology to enable long-reach connectivity of multimedia devices over a single standard LAN cable.

Established in 2006, Valens is a private company with offices in Israel, Japan, Hong Kong and the USA.