NVS2200

NVS2200 is a high performance cutting edge H.264 IP Camera SoC. It integrates high speed ARM9 processor core, high quality ISP, full duplex H.264 and MJPEG encoder, 10/100Base-T Ethernet MAC controller and efficient peripherals. Video stream data from camera sensor will be processed by ISP module and then encoded simultaneously by H.264 and MJPEG engines. CPU can upload the compressed video stream through network line. The embedded ISP module features best image quality with CCD and CIS Sensor, 2D Noise Reduction Filter, AE/AWB, OSD and Motion Detection functions. NVS2200 has NTSC/PAL Encoder and built-in 10bit 2CH DAC for CVBS and IRIS. Built-in SD resolution H.264 encoder enables best quality performance and high compression ratio. In addition, it supports fully-hardwired crypto accelerator, SD card controller for emergency data store and full duplex I2S/SSP for audio interface. NVS2200 will be best fit for high performance and cost effective IP camera solutions.

Features
- ARM9 RISC CPU embedded(210MHz, 16KB I/D-Cache)
- High Quality ISP
  - Supports Sony/Sharp CCD Sensor
  - Supports OmniVision/Micron CIS
  - NTSC/PAL, High/Normal, AE/AWB, 2D NRF
  - Motion/defect detection, privacy zone, horizontal mirror
  - On screen display(OSD)
- Video capture
  (CCIR656 input, maximum capture resolution up to 1280×1024)
- H.264 Encoder(H.264(ISO/IEC 14496-10) baseline profile)
  - Encode D1 max 60fps
- MJPEG encoder(MJPEG(ISO/IEC 10918-1))
  - Encode D1 max 30fps
- Crypto accelerator(DES, AES, SHA-1, MD5, Hash & HMAC)
- DDR SDRAM memory controller
- Static memory controller
- 10/100Base-T ethernet controller
- 3-port UART, SD / MMC card controller
- 16-pin GPIO / Timer / WDT / RTC / I2C / I2S
- DAC for CVBS and IRIS
- Package(289-TFBGA, 14mm×14mm, 0.8P)