

H.264 High Resolution Video & Audio Compression Board DS-4000HCI Series

Brief Introduction of Hikvision DS-4000HCI card

DS-4000HCI compression board is a professional digital security product, which adopts most advanced H.264 video compression algorithm and OggVorbis audio compression technology. Compared with DS-400xM and DS-400xH board, **DS-4000HCI** can support up to 16 channels in one board (DS-4016HCI), compress video with CIF/2CIF/DCIF/4CIF resolution and preview with 4CIF. Newly designed PCB of the card more compact and steady and compatible SDK interface makes development faster and easier.

DS-4000HCI board uses fully optimized algorithm based on DSP technology to implement video & audio real-time encoding, active video & audio preview and motion detection, etc. Video image is directly transmitted from board to display frame buffer and compressed stream is also directly sent to host's memory. The whole transmit doesn't need any intervention of host computer processor, saving resources of host computer's processor greatly. One Personal computer can support up to 64 channels Video and audio input, parameters of each channel can be set independently and will not affect each other.

DS-4000HCI compression board supports Windows 2000/XP/2003 and Linux operating system at present, provides demonstration application with its source code, the whole SDK development package including system SDK, player SDK, networks SDK, media Player plug in, etc, and also provides technical support and good after- sale service.

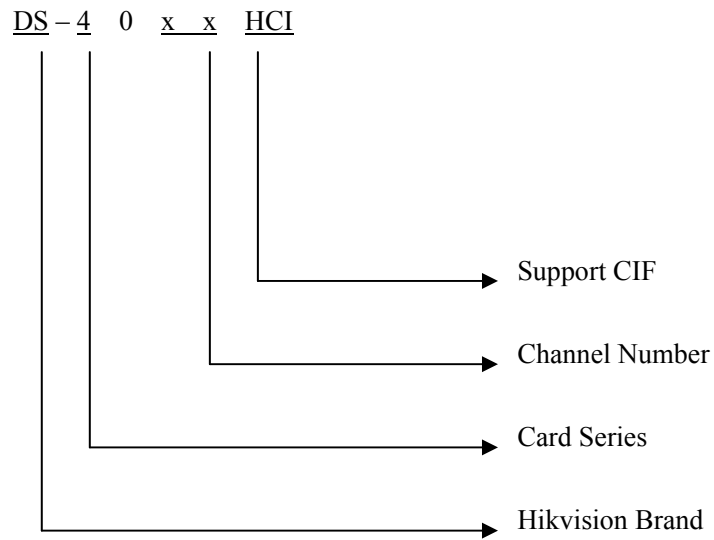
Model Description:



DS-4004HCI



DS-4008HCI



Note: The DS-4004HCI can be set as 4 Channels CIF/2CIF compression resolution or 2 Channels 4CIF compression resolution real time.

The DS-4008HCI can be set as 8 Channels CIF/2CIF compression resolution or 4 Channels 4CIF compression resolution real time.

Features & Functions :

H.264 (MPEG-4/Part 10) video compression standard leads to high compression ratio and good video quality

OggVorbis audio compression standard, with 16 kHz sampling rate and 16 kbps output bitrate

Real-time Video and Audio compression, No frame lost

4CIF preview resolution

Comply with PCI 2.2 standard, Support PCI-X slot, A PC can support up to 64 channels

Support Windows2000/XP and Linux operation system

Provide full SDK, demonstration with source code

Provide player SDK and network SDK for PC platform. Less than 1 second delay in LAN.

Setable I.B.P frame sequence

Setable video quality and bit rate

Setable brightness, contrast, saturation and hue of Video signal

Support motion detection

Support OSD, LOGO, and MASK overlay

Support double encoding

Merits of Adopting Hikvision H.264 Compression Board

H.264 encoding has the advantage of high image quality , low bitrate and low storage requirement, especially suitable for digital video security. Hikvision H.264 compression board is the state-of-the-art video / audio compression board, which adopts H.264 ACE (ADVANCED CODE EFFICIENCY). Compared with other compression board, its advantage embodies the following aspects:

Save storage space

Hikvision board compression ratio is higher than those that adopt MPEG-1 or other standards. Given the same capacity of hard disk, Hikvision board leads to longer recording time, thus reduces storage costs and maintenance expenses and improves systematic reliability.

Excellent image quality

Hikvision board adopts variable bitrate coding. It assures constant image quality to different scene and motion picture. Even violent motion cannot bring the mosaic phenomenon. Hikvision board supports real time preview without wobble or time delay.

Preminent characters of network transmission

Hikvision board adjust parameter dynamically, which is suitable to assure excellent and fluent image quality in network transmission. It supports 4CIF, DCIF, 2CIF, CIF, QCIF coding, variable bitrate and variable frame rate. This is more suitable for narrowband transmission, for instance, through PSTN,ISDN,DDN, etc.

Convenient control

Hikvision board's parameter, such as image quality, frame rate, and sensitive tolerance of motion detection can be adjusted when encoding. It can capture original image. Actively setting parameter is significant in video security.

Flexible and reliable motion detection

Hikvision board adopts most advanced motion detecting technology whose analytical precision can be adjusted dynamically. It can not only detect micro-motion but also throw away misinformation. Reliable motion detection and video setting reduce storage requirement. The whole detecting procedure is completely done on board. Motion detection is completely independent from compression. It can detect both fast and slow motion.

Convenient video overlay function

Hikvision board supports flexible title overlay function. It can overlap time on active video with transparent processing. Its location can be adjusted conveniently.

Outstanding stability and sustainability

Hikvision board adopts encoding algorithm, SDK function and decoding software, which are specially designed for digital video security. All of these make Hikvision board reliable and stable

Specifications:

Model	DS-4004HCI	DS-4008HCI
Video Input	4 Channels(PAL/NTSC)	8 Channels(PAL/NTSC)
	BNC(Vp-p = 1.0V, 75 Ω)	
Audio Input	4 Channels	8 Channels
	BNC(Vp-p=2.0V,SNR > 83DB,Linear Electrical Level ,1000Ω)	
Encode DSP number	1	2
Preview Resolution	Resolution: 704*576(PAL),704*480(NTSC)	
Video Compression	H.264, Support CBR, VBR; Frame rate: 25F/s(PAL),30F/s(NTSC) Output: 32kbps-1000kbps(CIF) or 70kbps-2000kbps(4CIF)	
Compression Resolution	4CIF:704*576(PAL),704*480(NTSC) DCIF:528*384(PAL),528*320(NTSC) 2CIF:704*288(PAL),704*240(NTSC) CIF:352*288(PAL),352*240(NTSC) QCIF:176*144(PAL),176*120(NTSC)	
Audio Compression	OggVorbis, Sample ratio is 16KHz, Output ratio is 16kbps	
Power Consumption	Less than 3.5W	Less than 7W
Working Temperature	-10°C--+50°C	
Working Humidity	10%--90%	
Dimension	155mm*95mm	185mm*107mm
System Requirements	OS : Windows 2000/XP/Server 2003 ,Redhat 9.0,Fedora 3 ,Fedora 4 CPU : Intel Series Motherboard: based on Intel 845 / 865 /915/925/945 Chipset Memory: 256MB or above Display Adapter: Nvidia Geforce Mx400/420/440 serials, FX 5200/5600 GeForce 6600 ATI Radeon 7000/7500/8500/9000/9200/9550/9600 serials, ATI X300/700 Intel 845G/865G/915G integrated Graphics Controller	