

Main Features

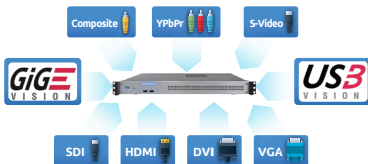
- ◆ 7th generation Intel® Core™ i7/i5 processors
- ◆ Up to 6CH Full HD 1080p or 2CH 4K/UHD 2160p video capturing
- ◆ HDMI/SDI/DVI/VGA/YPbPr video or GigE/USB vision inputs
- ◆ Camera control through RS232/RS422/RS485 and IP
- ◆ H.264/AVC, H.265/HEVC, VP9 hardware encoding and decoding
- ◆ Hardware acceleration for AI/deep learning
- ◆ OpenCV/OpenVX computer vision frameworks
- ◆ NEXCOM Cyber-Vision SDK



Introduction

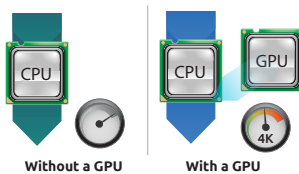
The **Cyber-Vision System CVS-135** is an open platform dedicated for versatile video/imaging applications such as **lecture capture, automatic inspection, medical imaging, enterprise collaboration, intelligent surveillance** and so on. Boosted by Intel 7th generation (Kaby Lake) Intel® Core™ i7/i5 CPU and it's integrated GPU, CVS-135 is proven to support up to 4K UHD video capturing and processing simultaneously. Broadly input options SDI, HDMI, VGA, DVI, YPbPr, S-Video and composite are empowered to capture video and audio contents from a wide range of source devices. CVS-135 benefits for you to focus on your application and we will take care everything else.

Advantages



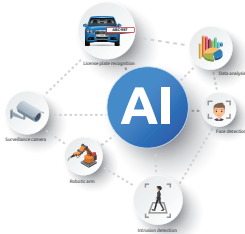
All video in one platform

With a range of video input configurations, NEXCOM Cyber-Vision series platforms are designed to provide the maximum flexibility and compatibility to connect all the video in one platform. Video source could be from any video interface such as HDMI, SDI, DVI, VGA, YPbPr, GigE and USB with proper configuration.



Proven performance for 4K video

In addition to traditional CPU, all of our platform equipped with high performance GPU or VPU to accelerate the video manipulations of your application. Not only benefits the performance upgrade, the system can lower the power consumption, improve the stability, and save the cost as well.



AI ready

Traditional computing power is no longer sufficient for deep learning and neural network computing models to deal with massive amount of sample data. GPU, VPU and FPGA becomes the best alternatives to work with CPU in order to fulfill AI application needs. NEXCOM Cyber-Vision solution was designated to be an open architecture platform to address vision/video/imaging applications and provides a set of friendly interfaces to computer vision frameworks such as OpenCV and OpenVX which definitely benefit for saving your development cost.



Collaboration Automatic inspection Lecture capturing Medical imaging Live event broadcasting Intelligent surveillance

Specifications

System

CPU	Support 6 th /7 th generation (Skylake/Kaby Lake) Intel® Core™ processors Verified processors: <ul style="list-style-type: none"> Intel® Core™ i7-7700 Processor (4.2GHz, 8MB Smart Cache, TDP 65W) Intel® Core™ i7-7700T Processor (3.8GHz, 8MB Smart Cache, TDP 35W) Intel® Core™ i5-7500 Processor (3.8GHz, 6MB Smart Cache, TDP 65W) Intel® Core™ i5-7500T Processor (3.3GHz, 6MB Smart Cache, TDP 35W)
Chipset	Intel Q170 PCH (embedded options available)
Memory	Max. Capacity 32GB. Default options: <ul style="list-style-type: none"> 8GB (4GB x 2) DDR4-2400 SO-DIMM 16GB (8GB x 2) DDR4-2400 SO-DIMM
Graphics & Display	Intel HD Graphics 630 Max resolution support up to 4096x2304 @60Hz (DP) Display support: DisplayPort 1.2, HDMI 2.0, DVI-D Support DirectX, Intel Quick Sync Video, OpenGL technologies
Ethernet	LAN1: 10/100/1000 Mbps supports WOL, PXE with Intel® i219LM (LAN 1) LAN2: 10/100/1000 Mbps supports, PXE with Intel® i211AT (LAN 2)
Storage	Default installation: <ul style="list-style-type: none"> 128GB or 256GB, 2.5" SSD, SATA3, MLC (2.5" bay tray for 2nd HDD expansion)

Video and Audio

Video Input	Support up to 6CH HD or 2CH UHD input at 60 FPS for each channel. SDI ¹ : 1920 x 1080 60/50fps (Max.) HDV ² : 3840 x 2160 60/50fps (Max.)
Capture Resolution	SDI ¹ : 1920 x 1080 60/50fps (Max.) HDV ² : 3840 x 2160 60/50fps (Max.)
Video Format	Support YV12, NV12, YUY2, RGB24, RGB32
Record	Video codec: H.264/AVC, H.265/HEVC Audio codec: AAC, AC3 File format: MP4, AVI, TS
Audio Input	SDI: Embedded audio HDV: Embedded audio (HDMI), Stereo L/R (VGA/DVI-D/YPbPr)

Expansion Slot

Internal Headers	LVDS header PS/2 keyboard and mouse header Serial Port header: COM3 (RS232/422/485), and COM4 (RS232)
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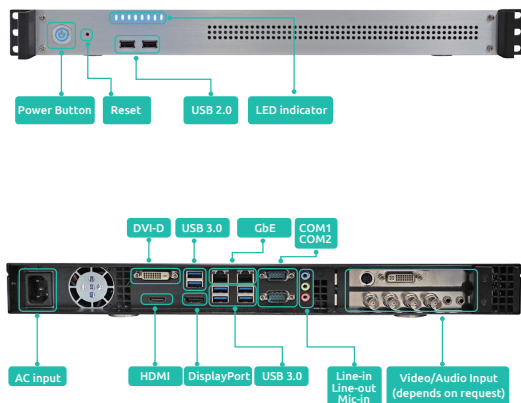
General

Power Supply	Flex ATX Power 250W (AC 110~240V auto-switching)
Weight	4.2kg
Dimension	438.8(W) x 279.5(D) x 44.1 (H) mm / 17.3 x 11 x 1.7 inch
Operating Temp.	-10°C – 50°C
Storage Temp.	-20°C – 85°C
Humidity	10% ~ 95% relative humidity, non-condensing
Certification	CE/FCC
Application	SDK available for application development

Dimension Drawing



Front & Rear I/O



Video Input Matrix

		HDV Input Channel#						
		0	1	2	3	4	5	6
SDI Input Channel#	0	V	V	V	V	V	V	V
	1	V	V	V	V	V	V	V
	2	V	V	V	V	V		
	3	V	V	V	V			
	4	V	V	V				
	5	V	V					
	6	V						

- ¹ SDI: SD-SDI/HD-SDI/3G-SDI with resolution support up to 1080p@60fps
² HDV: Could be HDMI/DVI/VGA/YPbPr video input and resolution support up to 1080p@60fps for each channel
 4K/UHD could be supported through HDMI 2.0 interface only

Ordering Information

- CVS-135**
Cyber Vision System with 7th Intel® Core™, i7-7700T 3.80 GHz processor, 16GB Memory and 256 GB SSD Storage
- CVS-135 Lite**
Cyber Vision System with 7th Intel® Core™, i5-7500T 3.30 GHz processor, 8GB Memory and 128 GB SSD Storage

Packing List

- Power cord x1
- CVS-135 (Lite) platform
- Foot pads and screws pack x 1
- Quick installation guide x1