

# Video Modules for AP-NC2xxx, AP- NC3xxx, AP-NC5xxx



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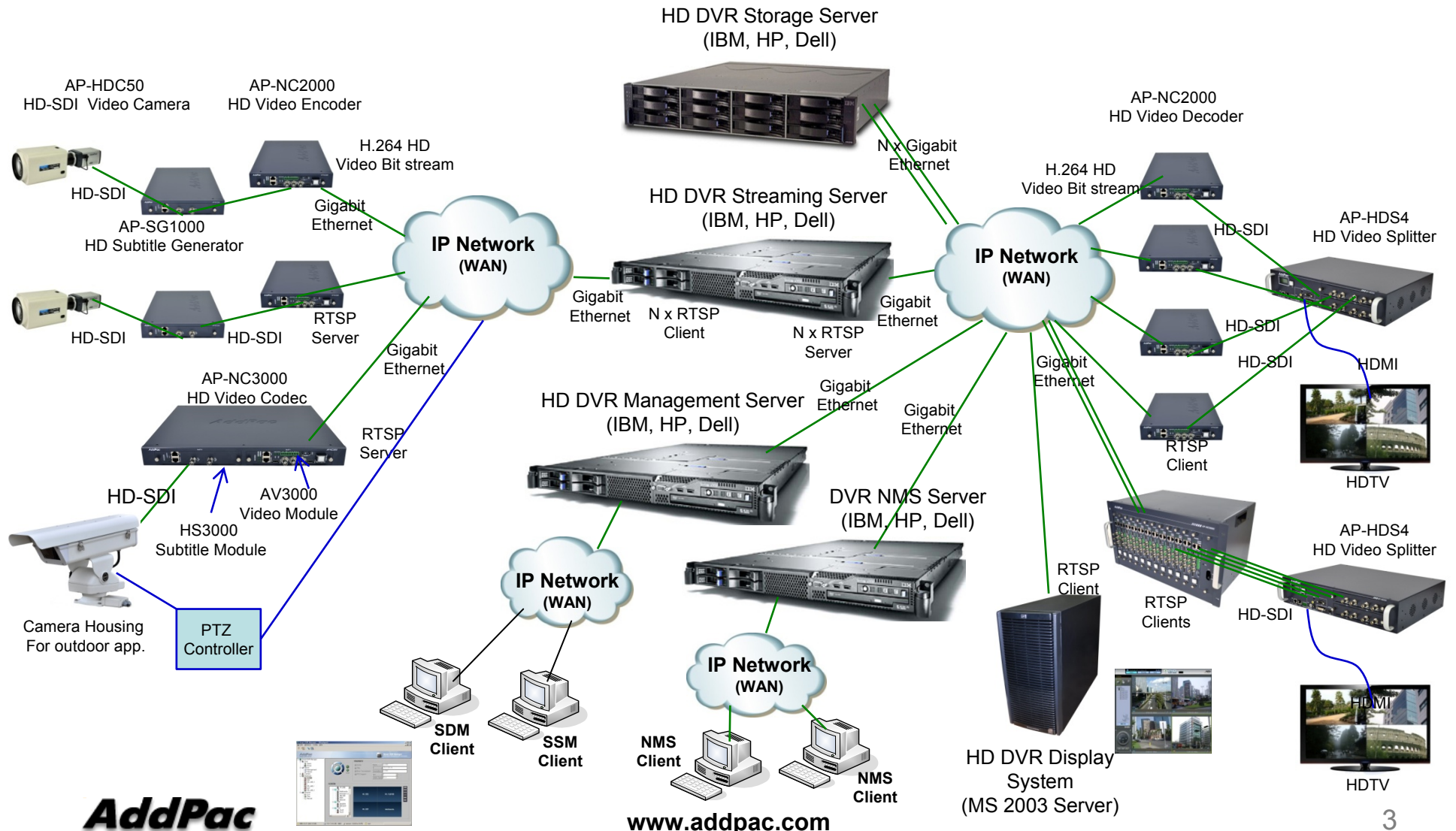
AddPac Technology

2010, Sales and Marketing

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# HD Network DVR Service Diagram

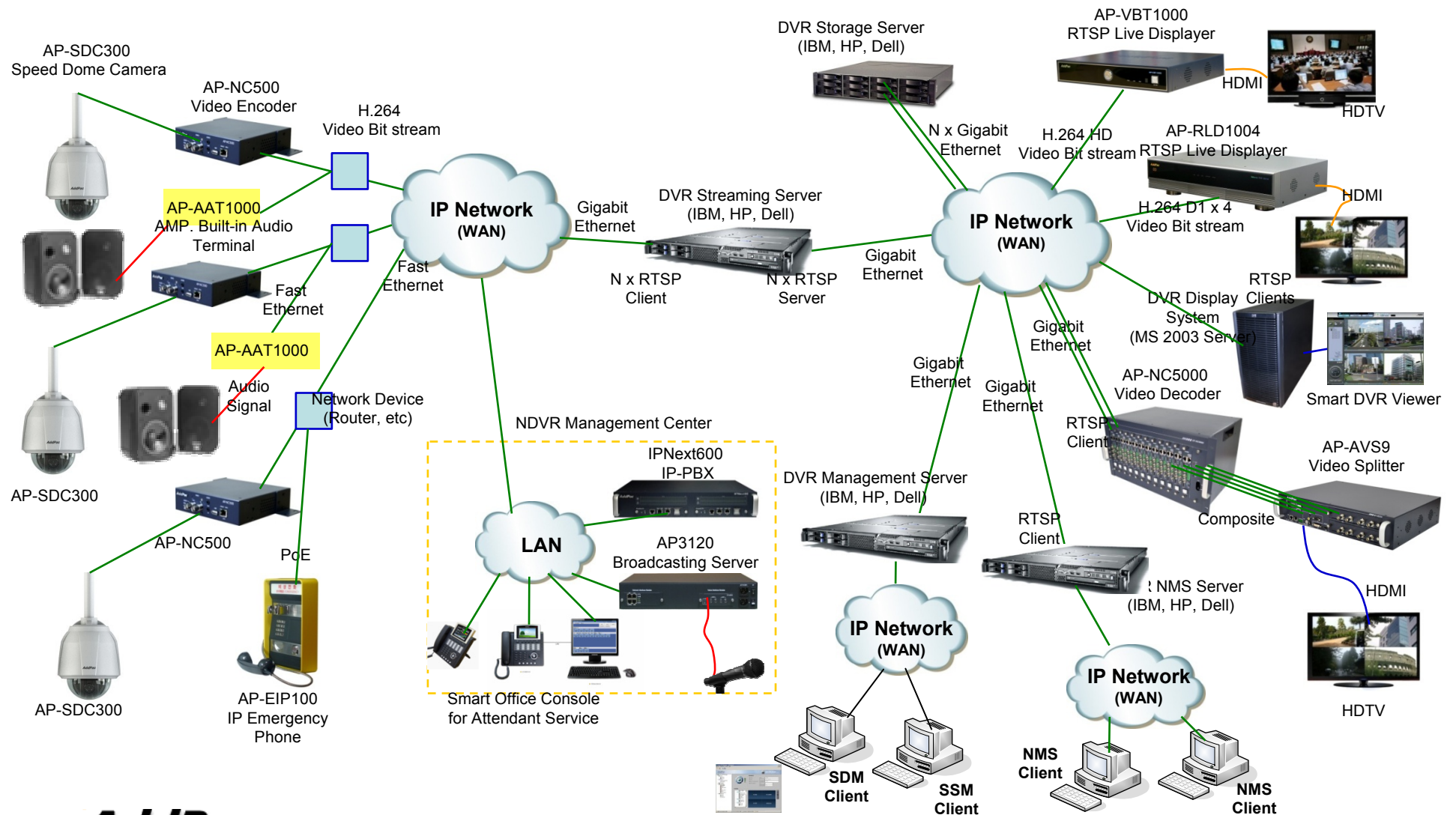



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# D1 Network DVR Service Diagram






# AP-NC2000, AP-NC3000, AP-NC5000 Platform

# AP-NC2000, AP-NC3000, AP-NC5000 Platform

	AP-NC2000D	AP-NC2000	AP-NC3000	AP-NC5000
Model				
Module Slot	1 Module Slot	1 Module Slot	2 Module Slots	10 Module Slots
Power Supply	External Power Supply(DC)	Internal Power Module (AC)	Internal Power Module (AC)	Internal Power Module (AC)
Power Type	Power Adaptor	Built-In	Built-In	Module Type



# Video Modules for AP-NC2xxx, AP-NC3xxx, AP-NC5xxxx

# Video Modules

High-end  
**DSP**

AV6000 Full HD Video Encoder Module  
(H.264 1080i, 720P Dual Encoding)





# Video Modules

High-end  
**DSP**

AV5000E HD Video Encoder Module  
(H.264 720P, D1 Dual Encoding)



AV5000D HD Video Decoder Module



AV3000 HD Video Encoder/Decoder Module  
(H.264 720P, D1 Dual Encoding)



AV2000 D1 Video Encoder/Decoder Module  
(H.264 D1, CIF Dual Encoding)



# Video Modules

High-end  
**DSP**

AV1800 D1 Video Decoder Module  
(H.264/MPEG4 D1 Decoding)



HS3000 HD-SDI Subtitle Generator Module



AS2000 Analog Subtitle Generator Module



HC3000 HD Video Signal Converter Module



# AV6000 Full HD Video Codec Module

High-end  
**DSP**

## Main Features

- Full HD (1080i) Video Encoding/Decoding Service Features
- Video Codec : H.264 HP/MP/BP
- Video Input Interface : HDMI, HD-SDI, Analog (NTSC, PAL)
- Video Output Interface : HDMI, HD-SDI, Analog (NTSC, PAL)
- Dual Bit Streaming Support
- RTSP/RTP, TCP/UDP Protocol Support
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Web based Management Service
- AP-NC2000D, AP-NC2000, AP-NC3000, AP-NC5000 Platform Available

# AV6000 Full HD Video Codec Module

High-end  
**DSP**

## Hardware Specification

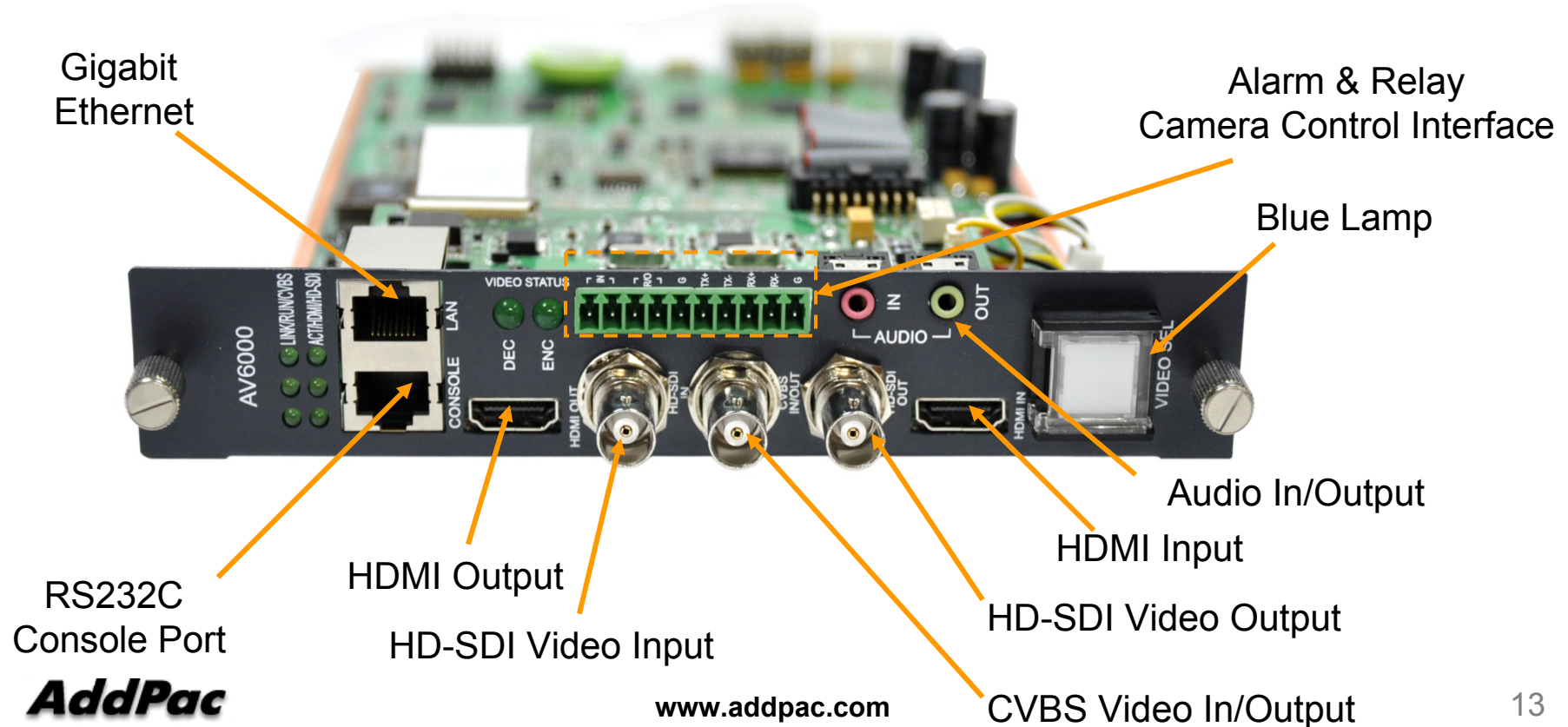
- **RISC + Video Processor Computing Power**
- **AP-AV6000 Video Module**
  - **Network Interface**
    - One(1) 10/100/1000Mbps Gigabit Ethernet
  - **Video Interface**
    - One(1) Channel HD-SDI Input
    - One(1) Channel HDMI Input
    - One(1) Channel CVBS Input or Output (selected by DIP Switch)
    - One(1) Channel HD-SDI Output
    - One(1) Channel HDMI Output
  - **One(1) RS-232 Console Interface (RJ45)**
  - **Camera Control Interface**
    - One(1) RS-232C, RS422, RS485 Interface for External Camera Control
  - **I/O Interface**

# AV6000 Full HD Video Codec Module

High-end  
DSP

## Hardware Module Specification

AV6000 HD Video Encoder/Decoder Module(H.264)



# AV6000 Full HD Video Codec Module

High-end  
**DSP**

## Triple Video Encoding Bit Stream Matrix

Video Input	Concurrent Video Encoding Bit Stream			
	CIF	D1	HD(720P)	FULL HD (1080i)
Analog Video Input (NSTC/PAL)	Available	Available	N/A	N/A
HD-SDI Video Input (720P)	Option	Available	Available	N/A
HD-SDI Video Input (1080i)	Option	Available	Available	Available

# AV5000E HD Video Codec Modules

High-end  
**DSP**

## Main Features

- IP based HD Video Encoding Solution
- H.264 Video Codec : Dual Encoding(720P, D1 Dual Encoding)
- RTSP, TCP/UDP Protocol Support
- RTP/RTCP Protocol Support
- One(1) Gigabit Ethernet Interface
- RS232/RS422/RS485 Interface for Camera Control
- Up to HD Video Resolution, Up to 30 frame/sec, Up to 8Mbps bandwidth
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability

# AV5000E HD Video Codec Modules

High-end  
**DSP**

## Hardware Specification

- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Powerful Video Interface
  - Video Input : HD-SDI Input, HDMI Input, Component Video Input
- High quality Audio Interface
  - One(1) Audio Stereo Input, Output channel
- Camera Control Interface
  - One(1) RS-232C, RS422, RS485 Interface for External Camera Control
- I/O Interface
  - 2 Alarm Input, 1 Relay Out

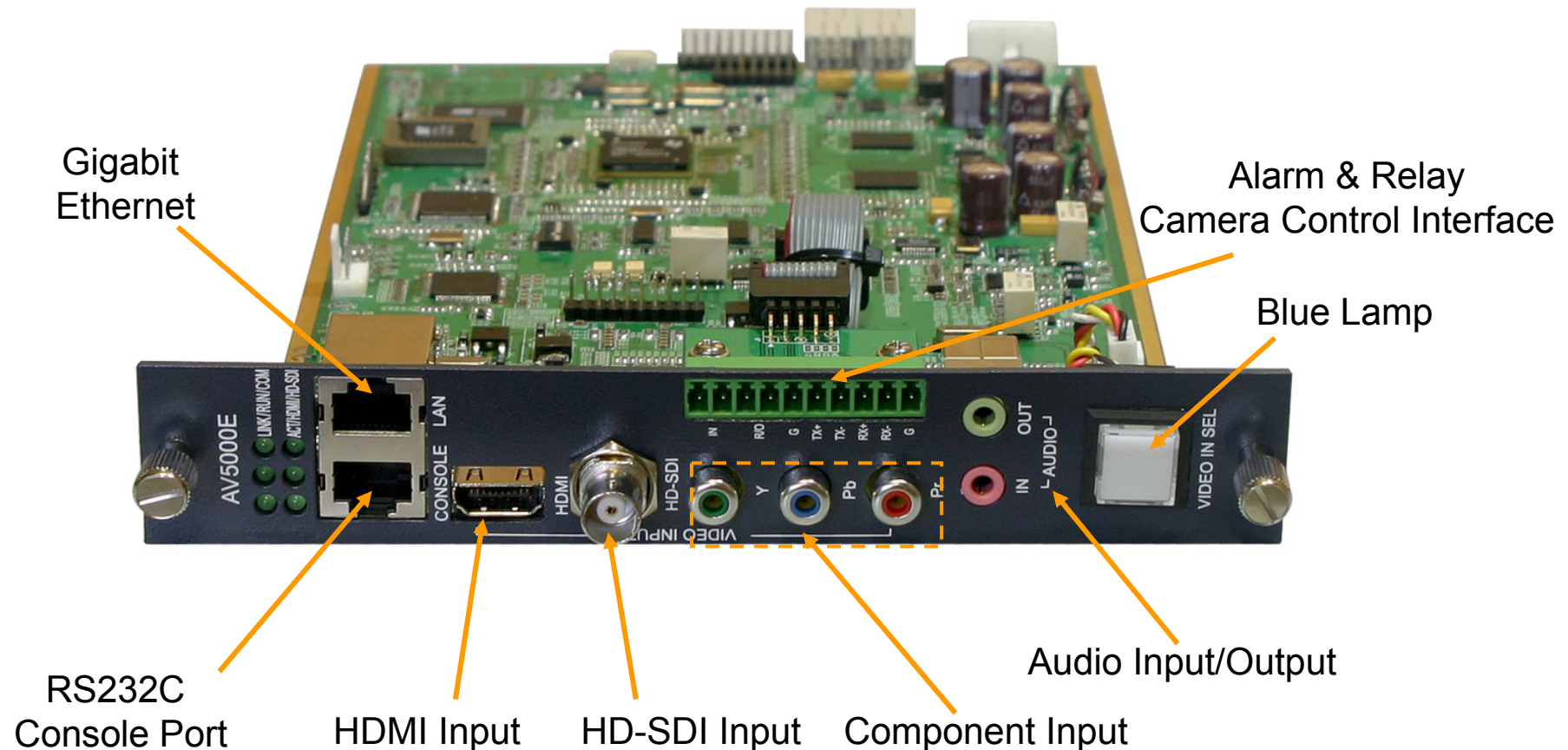


# AV5000E HD Video Codec Modules

High-end  
**DSP**

## Hardware Module Specification

AV5000E HD Video Encoder Module (H.264)



# AV5000D HD Video Codec Modules

High-end  
**DSP**

## Main Features

- IP based HD Video Decoding Solution
- H.264 Video Codec : 720P, D1 Video Decoding, Upscaling to 720P
- RTSP, TCP/UDP Protocol Support
- RTP/RTCP Protocol Support
- One(1) Gigabit Ethernet Interface
- RS232/RS422/RS485 Interface for Camera Control
- Up to HD Video Resolution, Up to 30 frame/sec, Up to 8Mbps bandwidth
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability

# AV5000D HD Video Codec Modules

High-end  
**DSP**

## Hardware Specification

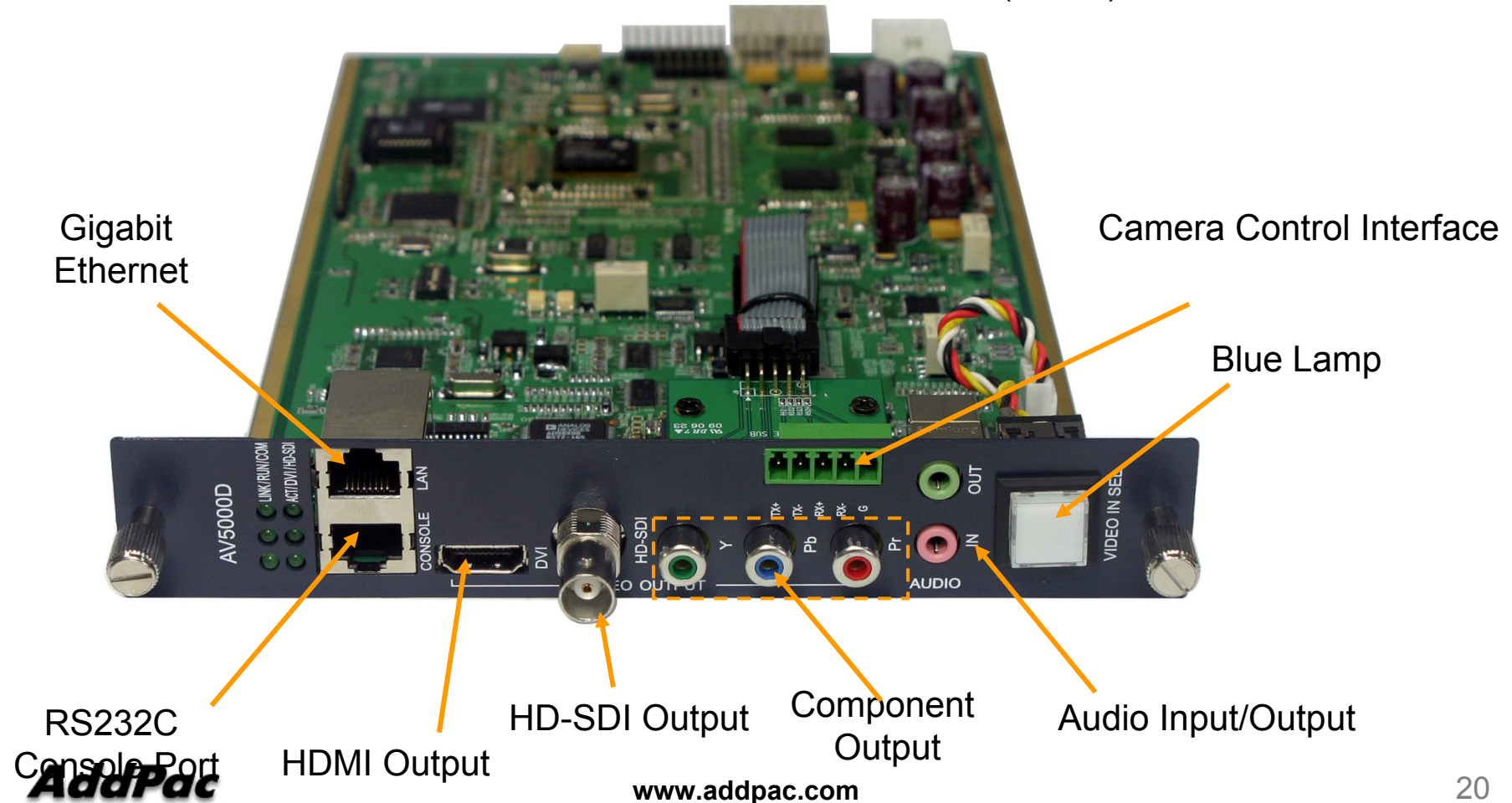
- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Powerful Video Interface
  - Video Output : HD-SDI, HDMI , Component Video
- High quality Audio Interface
  - One(1) Audio Stereo Input, Output channel
- Camera Control Interface
  - One(1) RS-232C, RS422, RS485 Interface for External Camera Control

# AV5000D HD Video Codec Modules

High-end  
DSP

## Hardware Module Specification

AV5000D HD Video Decoder Module (H.264)



# AV3000 HD Video Codec Modules

High-end  
**DSP**

## Main Features

- IP based HD Video Encoding/Decoding Solution
- H.264 Video Codec : Dual Encoding(720P, D1 Dual Encoding)
- RTSP, TCP/UDP Protocol Support
- RTP/RTCP Protocol Support
- One(1) Gigabit Ethernet Interface
- RS232/RS422/RS485 Interface for Camera Control
- Up to HD Video Resolution, Up to 30 frame/sec, Up to 8Mbps bandwidth
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability

# AV3000 HD Video Codec Modules

High-end  
**DSP**

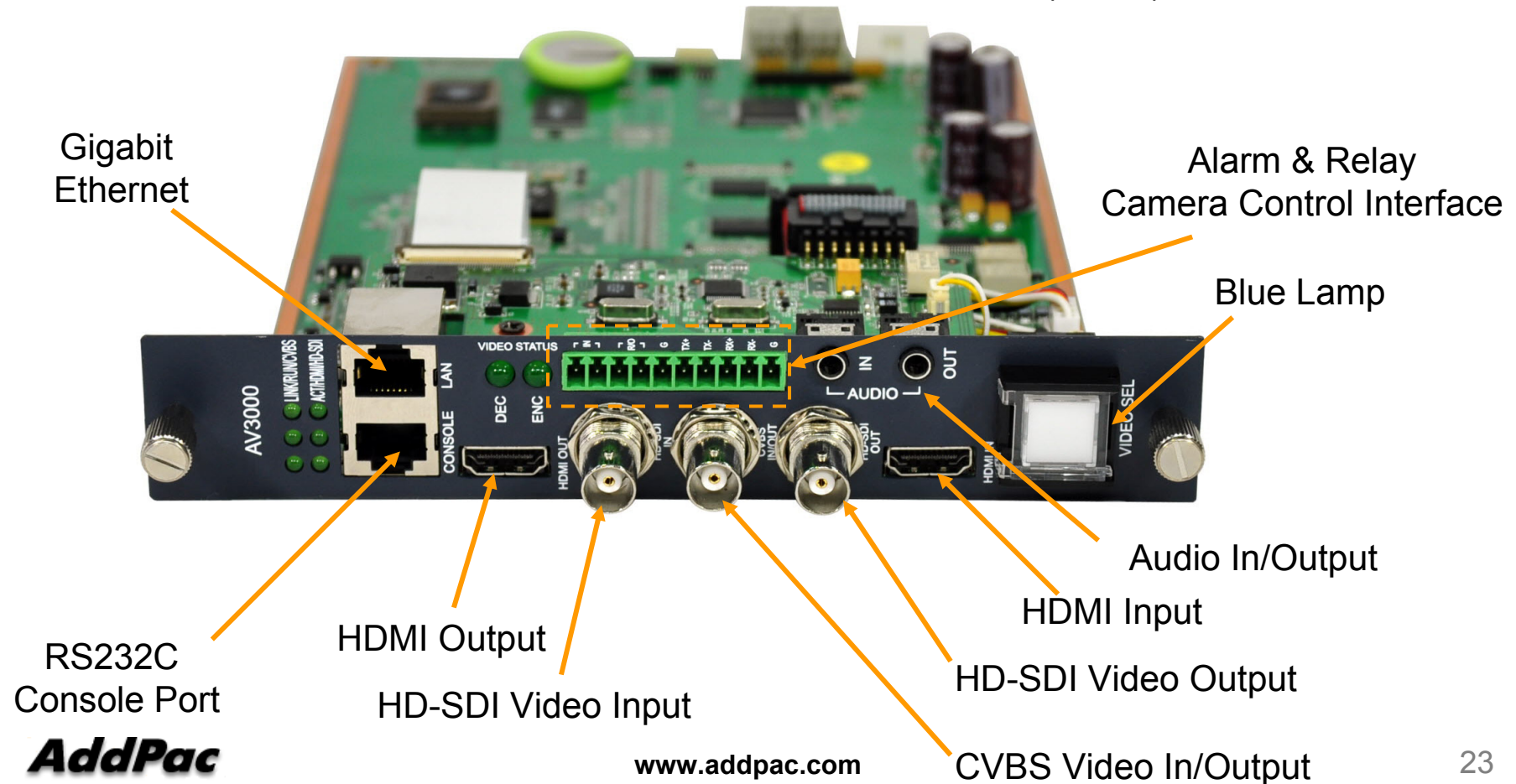
## Hardware Specification

- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Powerful Video Interface
  - Video Input : HD-SDI Input, HDMI Input, CVBS Video Input(BNC)
  - Video Output : HD-SDI Output, HDMI Output, CVBS Video Output(BNC)
- High quality Audio Interface
  - One(1) Audio Stereo Input, Output channel
- Camera Control Interface
  - One(1) RS-232C, RS422, RS485 Interface for External Camera Control
- I/O Interface
  - 2 Alarm Input, 1 Relay Out

# AV3000 HD Video Codec Modules

## Hardware Module Specification

AV3000 HD Video Encoder/Decoder Module(H.264)



# AV2000 D1 Video Codec Modules

## Main Features

- IP based Video Encoding/Decoding Solution
- H.264 Video Codec : D1 Module(D1, CIF Dual Encoding)
- RTSP, TCP/UDP Protocol Support
- RTP/RTCP Protocol Support
- One(1) Gigabit Ethernet Interface
- RS232/RS422/RS485 Interface for Camera Control
- Up to D1 Video Resolution, Up to 30 frame/sec, Up to 2Mbps bandwidth
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability



# AV2000 D1 Video Codec Modules

High-end  
**DSP**

## Hardware Specification

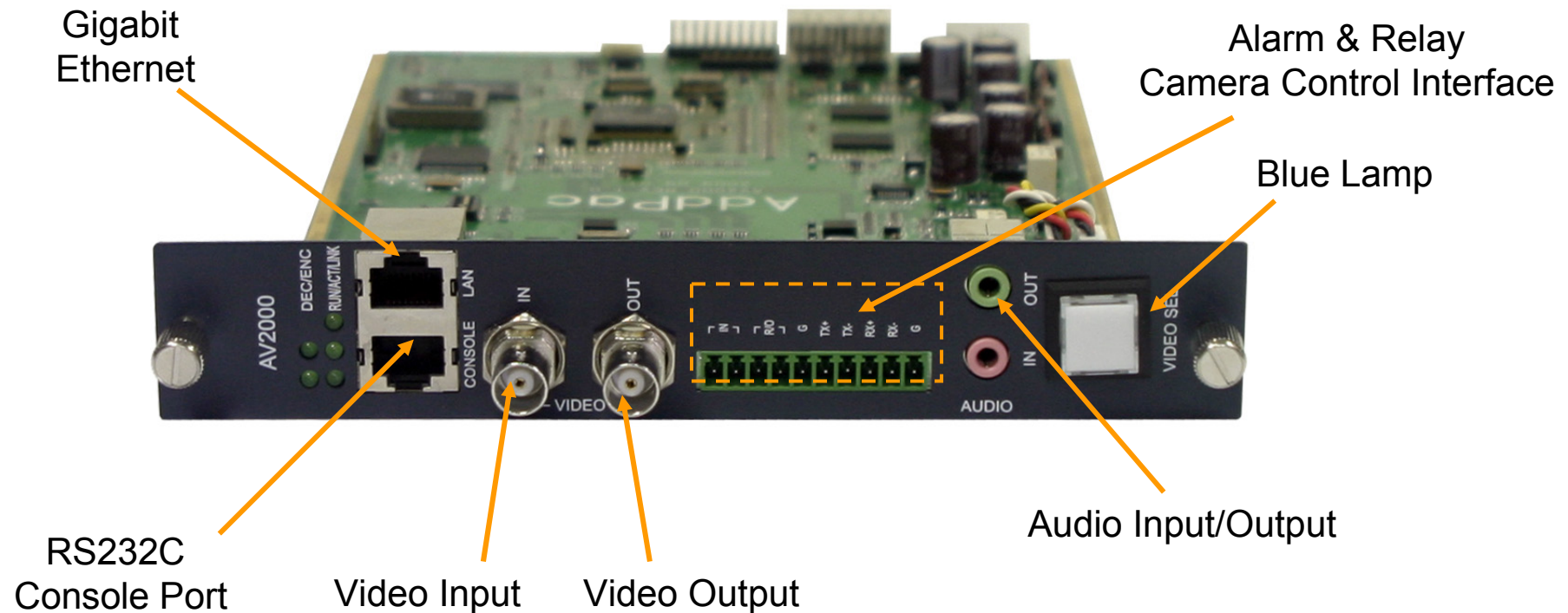
- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Powerful Video Interface
  - Video Input : 1 Channel Video Input (BNC) : NTSC, PAL
- High quality Audio Interface
  - One(1) Audio Stereo Input, Output channel
- Camera Control Interface
  - One(1) RS-232C, RS422, RS485 Interface for External Camera Control
- I/O Interface
  - 2 Alarm Input, 1 Relay Out

# AV2000 D1 Video Codec Modules

High-end  
**DSP**

## Hardware Module Specification

AV2000 D1 Video Encoder/Decoder Module (H.264)



# AV1800D D1 Video Decoder Modules

High-end  
**DSP**

## Main Features

- IP based Video Decoding Solution
- H.264, MPEG4 Video Codec (D1, CIF), CIF to D1 Upscaling
- RTSP, TCP/UDP Protocol Support
- RTP/RTCP Protocol Support
- One(1) Fast Ethernet Interface
- RS232/RS422/RS485 Interface for Camera Control
- Up to D1 Video Resolution, Up to 30 frame/sec, Up to 2Mbps bandwidth
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability

# AV1800 D1 Video Decoder Modules

High-end  
**DSP**

## Hardware Specification

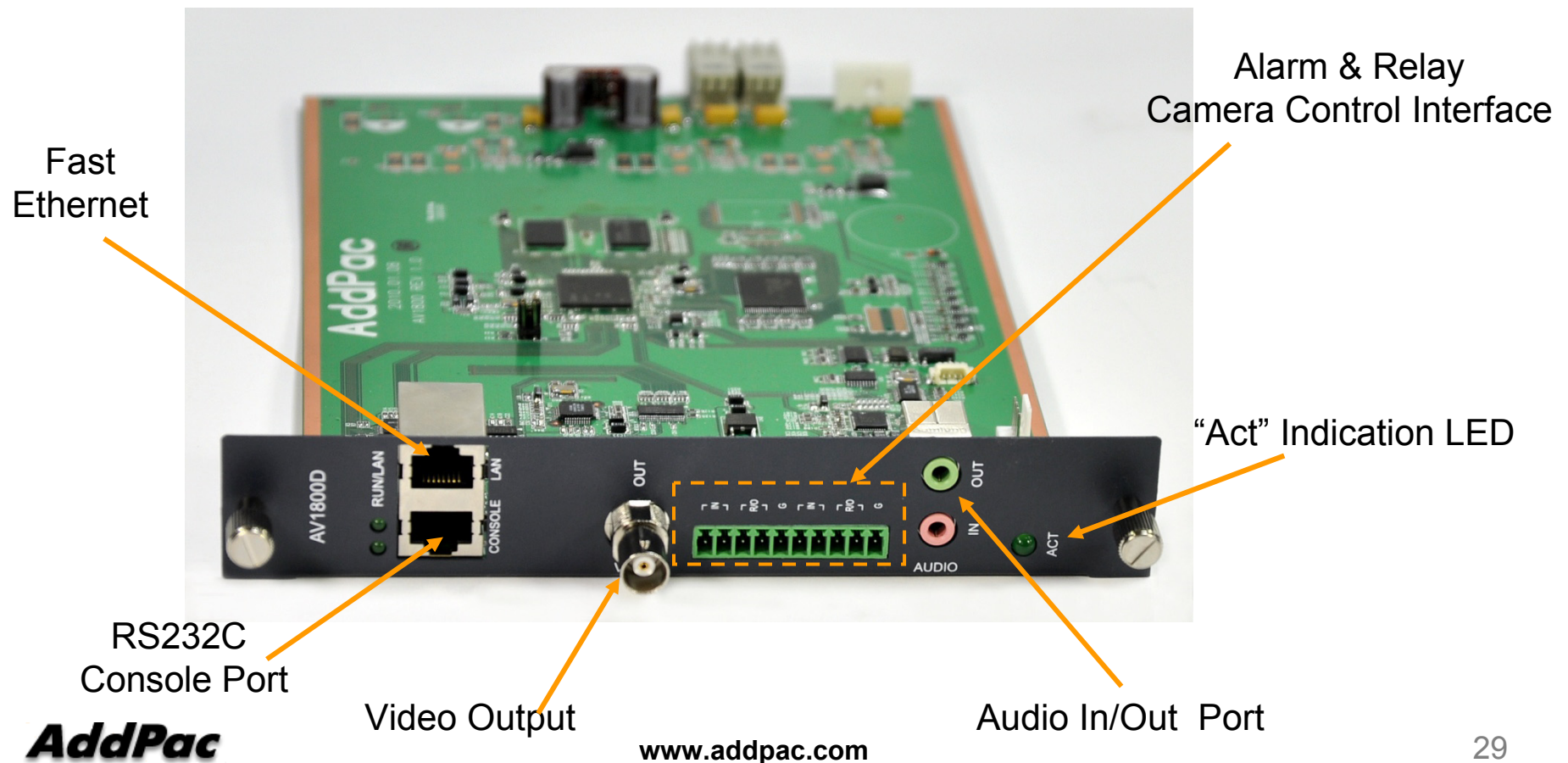
- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100Mbps Fast Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Powerful Video Interface
  - Video Output : 1 Channel Video Output (BNC) : NTSC, PAL
- High quality Audio Interface
  - One(1) Audio Stereo Input channel
  - One(1) Audio Stereo Output Channel
- Camera Control Interface
  - One(1) RS-232C, RS422, RS485 Interface for External Camera Control
- I/O Interface
  - 2 Alarm Input, 1 Relay Out

# AV1800 D1 Video Decoder Modules

High-end  
DSP

## Hardware Module Specification

AV1800 Video Decoder Module  
(H.264, MPEG4, Up to D1 Resolution)



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# HS3000 HD Subtitle Generator Modules

High-end  
**DSP**

## Main Features

- HD-SDI Subtitle Generation Service Features
- PC based Subtitle Controller Software
- High-end Video Processor Architecture
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- One(1) RS232C Command Line Interface(RJ45)
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

# HS3000 HD Subtitle Generator Modules

High-end  
**DSP**

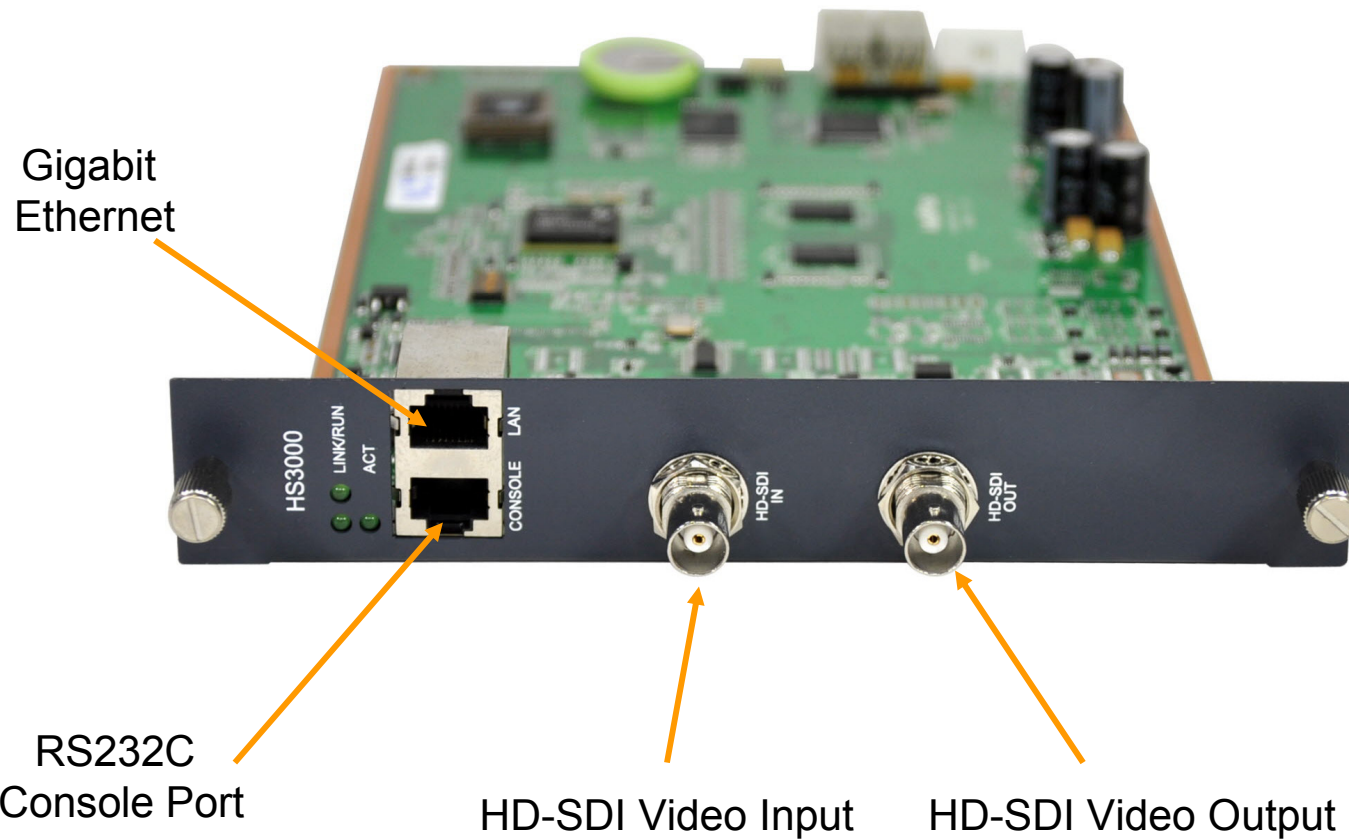
## Hardware Specification

- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Video Interface
  - Video Input : 1 Channel Video Input (HD-SDI)
  - Video Output : 1 Channel Video Output (HD-SDI)

# HS3000 HD Subtitle Generator Modules

High-end  
**DSP**

## HS3000 HD-SDI Subtitle Generator Module Specification





# AS2000 Analog Subtitle Generator Module

High-end  
**DSP**

## Main Features

- Analog Subtitle Generation Service Features(NTSC, PAL)
- PC based Subtitle Controller Software
- High-end Video Processor Architecture
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- One(1) RS232C Command Line Interface(RJ45)
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability
- Audio/Video Privacy Protection

# AS2000 HD Subtitle Generator Modules

High-end  
**DSP**

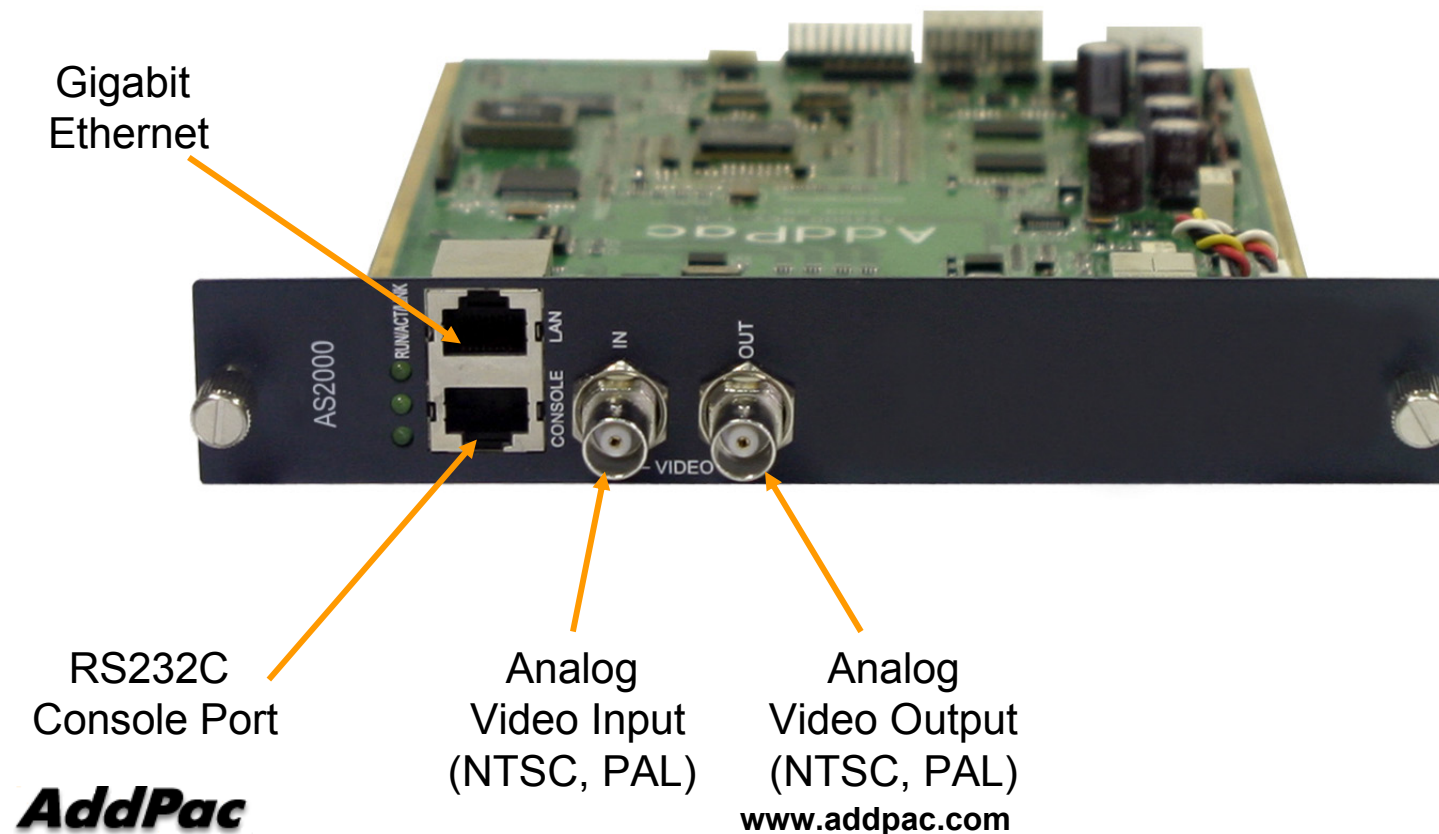
## Hardware Specification

- High-end Video Processor Architecture
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet (RJ45)
- Command Line Interface
  - One(1) RS-232C Interface (RJ45)
- Video Interface
  - Video Input : 1 Channel Video Input (Analog CVBS)
  - Video Output : 1 Channel Video Output (Analog CVBS)

# AS2000 HD Subtitle Generator Modules

High-end  
**DSP**

## AS2000 Analog Subtitle Generator Module Specification



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# HC3000 HD Video Signal Converter Module

High-end  
**DSP**

## Main Features

- Video Signal Converting Service Features
- Analog Video Signal Input or Output Port
- RGB 15 Pin VGA Signal Output Port
- HD-SDI Input Port
- HD-SDI Output Port
- One(1) Channel HDMI Output for HDTV Display (Full HD, Upscaling)
- IP based Network Surveillance Solution
- High-performance Video, Audio, and Voice Service
- Firmware Upgradeable Architecture
- Video Solution with Outstanding Network Service Capability

# HC3000 HD Video Signal Converter Module

High-end  
**DSP**

## Video In/Out Signal Converting Matrix

Video Input	Video Output		
Analog Composite Video Input (BNC Connector, NSTC/PAL)	Upscaling	Upscaling	-
	HD-SDI Output (720P,1080i)	HDMI Output (720P, 1080i) 1024x768 for DVI Monitor	RGB Output (VGA)
HD-SDI Video Input (720P, 1080i)	Downscaling	Upscaling	Downscaling
	Analog Video Output (NTSC,PAL)	HDMI Output (720P, 1080i) 1024x768 for DVI Monitor	RGB Output (VGA)

# HC3000 HD Video Signal Converter Module

High-end  
**DSP**

## Hardware Specification

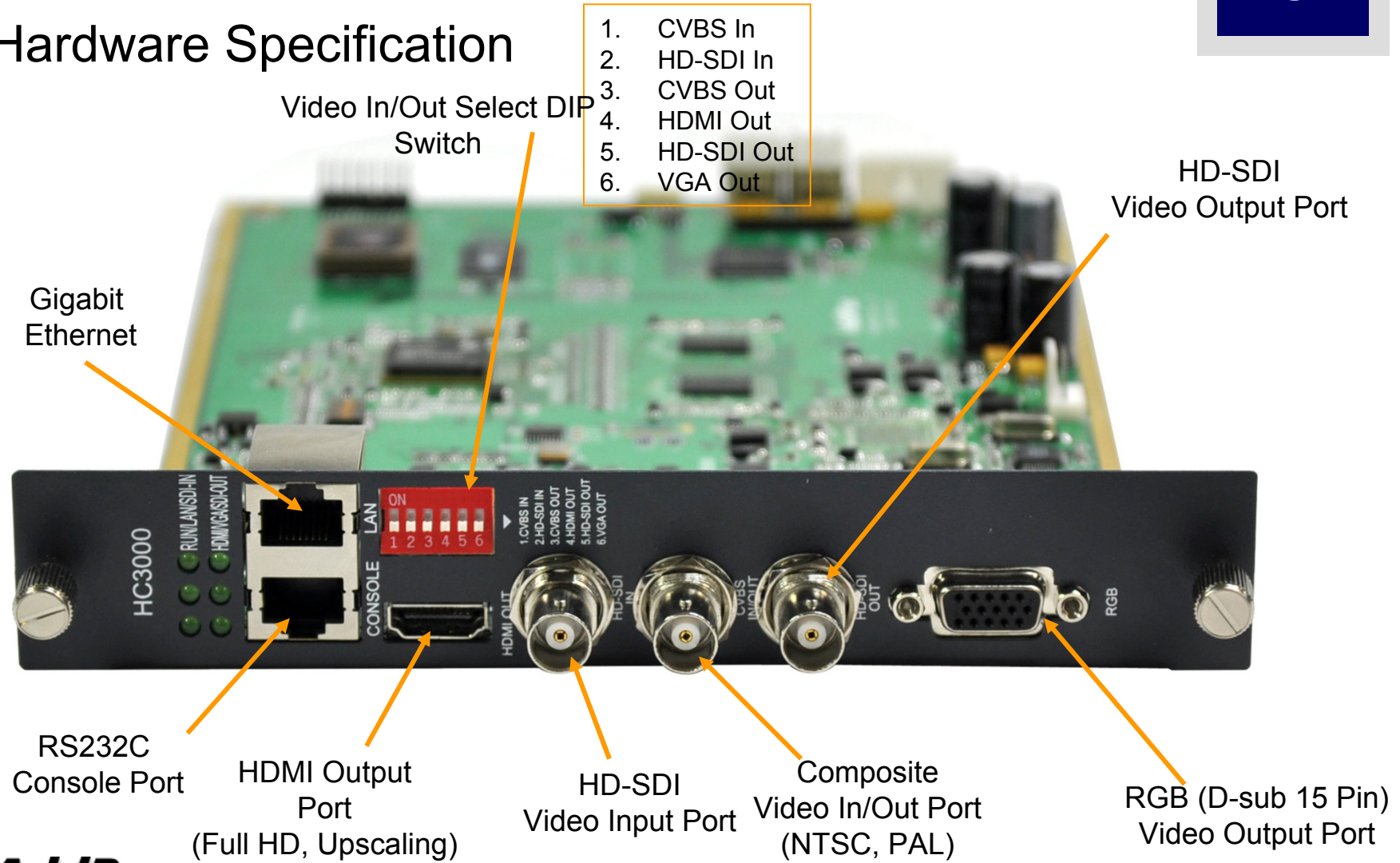
- RISC + Video Processor Computing Power
- AP-HC3000 Video Module
  - Network Interface
    - One(1) 10/100/1000Mbps Gigabit Ethernet
  - Video Interface
    - One(1) Channel HD-SDI Input
    - One(1) Channel HD-SDI Output
    - One(1) Channel CVBS Input or Output (selected by DIP Switch)
    - One(1) RGB 15 Pin Video Output
    - One(1) HDMI Video Output for External HD Display Device
  - One(1) RS-232 Console Interface (RJ45)

# HC3000 HD Video Signal Converter Module

High-end  
DSP

## Hardware Specification

1. CVBS In
2. HD-SDI In
3. CVBS Out
4. HDMI Out
5. HD-SDI Out
6. VGA Out





# Thank you!

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