# IPNext500 System Redundancy IP-PBX

High-performance Next Generation IP-PBX Solution

#### **Preliminary Product Overview**

(Without notice, following described technical spec. can be changed)





**AddPac Technology** 

Sales and Marketing

### Contents

- Product Overview
- Hardware Specification
- System Redundancy Features
- Software Service
- IP Telephony Service and Features
- RTP Proxy Service
- User Presence Service
- Network Service and Features
- Application Area
- Ordering Information



#### **Product Overview**

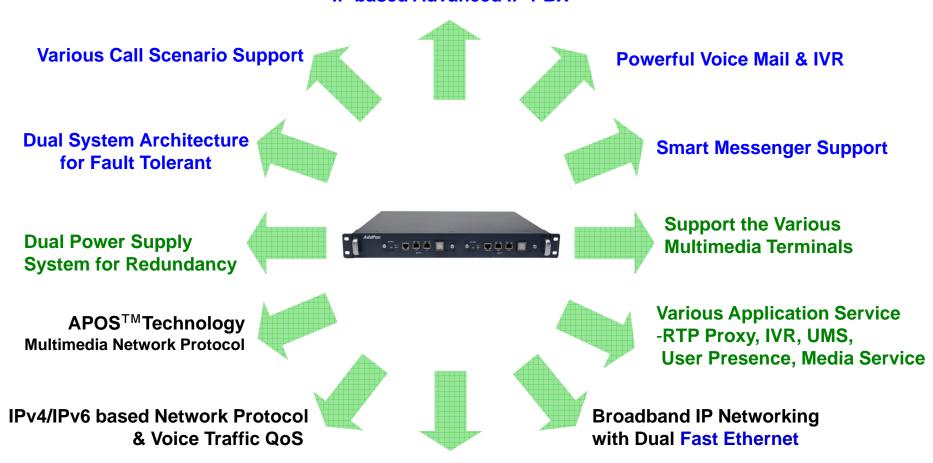
- SIP Application Server, Proxy, Registrar and Location Server
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
- Dual System Redundancy Architecture
  - Two(2) Gigabit Ethernet Interface / System
- High Performance RISC Architecture
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- IPv4/IPv6 Dual Stack
- RTP Proxy Function Embedded for Private IP and IPv6 Address Interworking
- User Presence Service Features for Smart Multimedia Messenger and Smart IP Phone
- IVR Scenario Editor, Voice Mail, Media Service (Coloring), Conference
- Firmware Upgradeable Architecture
- Smart Multimedia Manager for IP-PBX Management
- Smart Messenger Service (click to dial) for Unified Communication
- Smart NMS (Network Management System) for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Dual Power Supply for Redundancy



# **Product Highlights**

IPNext500 Next Generation IP-PBX System

#### IP based Advanced IP-PBX





Smart Multimedia Management for Operation & Management www.addpac.com

# Hardware Specification

RISC CPU

- High-End Microprocessor Computing Power
- Main Chassis
  - Dual Redundancy CPU Boards for System Fault Tolerant
    - Two(2) 10/100/1000Mbps Gigabit Ethernet
    - One(1) RS-232C Console (RJ45)
  - Dual Redundancy Power Supply
  - Hot-Swap Features

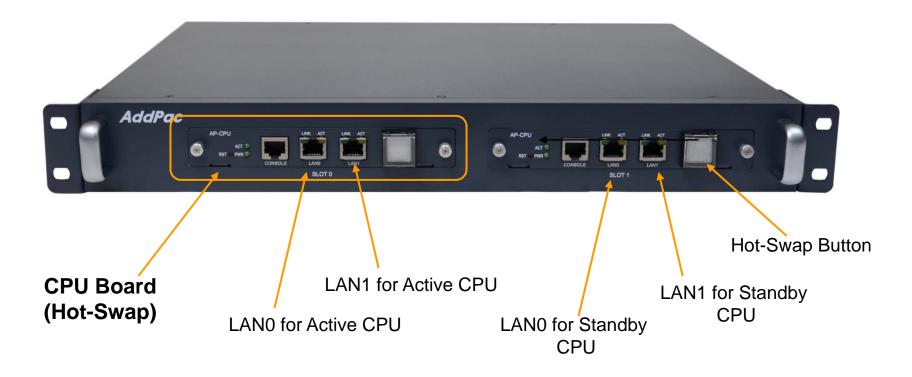


# Hardware Specification

IPNext500 Next Generation IP-PBX System



#### **IPNext500 Front Side**



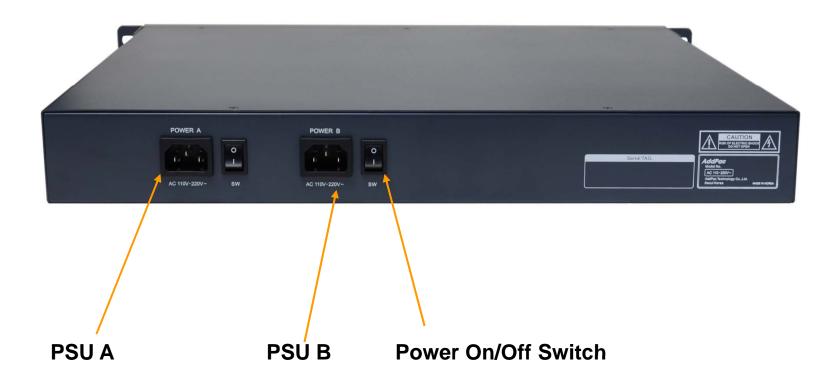


# Hardware Specification



IPNext500 Next Generation IP-PBX System

#### **IPNext500 Back Side**

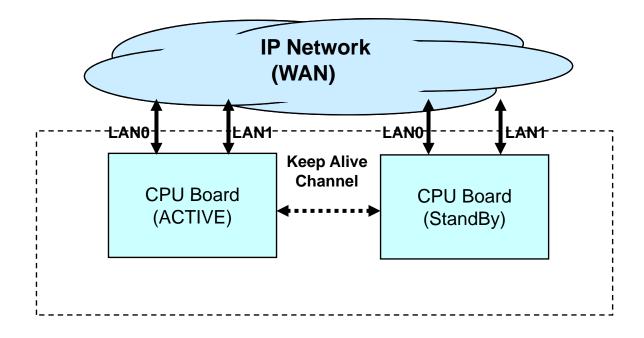




# System Redundancy Features

IPNext500 Next Generation IP-PBX System

#### **IPNext500 System Block Diagram**

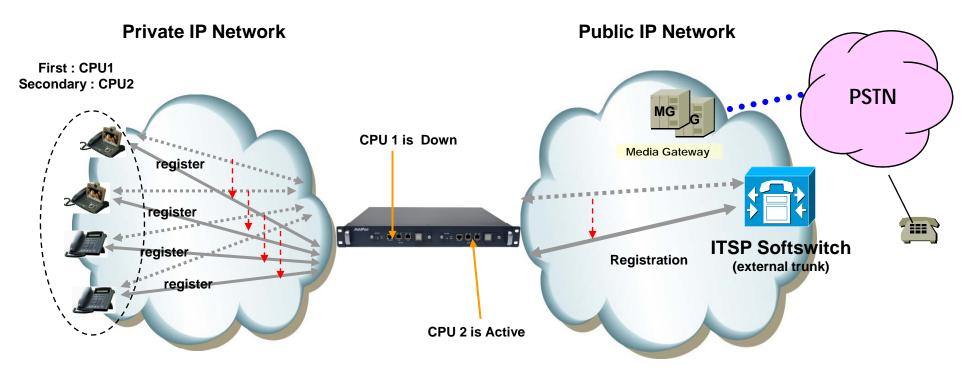




# System Redundancy Features

IPNext500 Next Generation IP-PBX System

- Active— Active Duplication Scheme
- Active Standby Duplication Scheme
- VRRP based Duplication Scheme



Active – Standby Duplication Scheme (example)



#### Software Service

IPNext500 Next Generation IP-PBX System

Built-in AddPac APOS Internetworking Software

- Scalability, Functionality, and Stability Features
- Advanced IP-PBX Call Manager Features
- QoS Control Features
- Programmable Video, Audio, and Voice Services
  - Audio, Video and Voice Codec
- Firmware Upgradeable Architecture
- Industry Standard Network Protocol Features
- Highly User Friendly Management Features
  - PC based Smart Messenger
  - Smart Multimedia Manager for Operation & Management



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**APOS** 

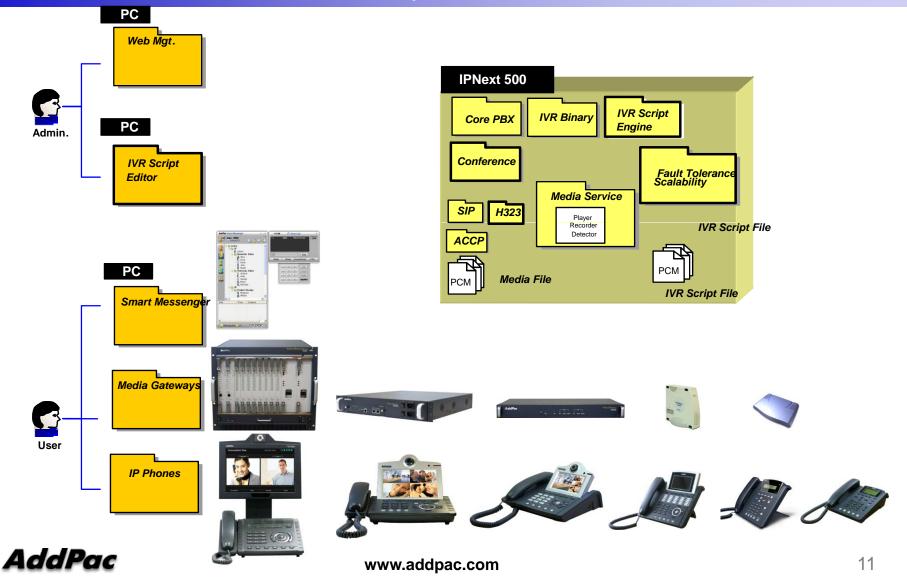
AddPac

Smart Messenger

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Managemen

# **IP-PBX Software Components**



#### IPNext500 Next Generation IP-PBX System

#### Signaling Server

- SIP Application Server, Proxy, Registrar and Location Server (RFC3261)
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
  - IP UA Client Role for Registering to ITSP SIP Server
  - H.323 Gatekeeper Client Role for Registering to ITSP H.323 Gatekeeper Server

#### IVR & Auto Attendant

- Default Auto Attendant Support
- Interactive Voice Response (IVR)
  - Provides with GUI-based Smart IVR Scenario Editor
  - Upload/Download Scenario by Smart IVR Scenario Editor
  - Supports Multiple Concurrent Scenarios
  - Supports Recordable IVR Prompts

#### Voice Mail

- Support Voice Mail with IVR
- Access from Remote Site via Trunk Support
- Voice Mail Notification Support



#### IPNext500 Next Generation IP-PBX System

#### Number & Call Routing

- Trunk Hunting by Preference or Sequential
- Call Hunting by Preference, Simultaneous, Random
- Call Hunting by Chained Hunting Group
- Partition for Address Grading
- Call Class for Call Access Control
- Number Translation Rule for Inbound/Outbound Call
- Centrex with Prefix Support
- Multiple Shared Devices with One Number
- Multiple Numbers on One Device
- Individual Call Park within Park Number Pool
- Group Call Park within a Group or Other Group
- Call Pickup of Ringing Call of Same Group or Other Group
- Call Pickup of Parked Call
- Call Transfer Blind, Consult
- Call Forwarding Unconditional, Busy, No Answer, Voice Mail
- Call Waiting
- Call Swaping
- Call Hold



#### IPNext500 Next Generation IP-PBX System

#### IP-PBX Advanced Features with AddPac IP Phones

- Multiple Call Handling with Call Status and Calling Line Number and Name
- Plug and Play with Auto Discovery Function
- Softkey Map Download and Control
- Time and Date Setting
- Voice Mail List View
- Parked Call List View
- Call Forward Setting
- Recent Call List View
- Calling Number and Name Identification
- Individual Call Park within Park Number Pool by Softkey
- Group Call Park within a Group or Other Group by Softkey
- Call Pickup of Ringing Call of Same Group or Other Group by Softkey
- Call Pickup of Parked Call by Softkey
- Call Transfer Blind, Consult by Softkey
- Call Waiting Indication
- Call Swaping by Softkey
- Call Hold by SoftKey
- Conference Control



#### IPNext500 Next Generation IP-PBX System

#### User & Device Management

- LDAP (Light weight Directory Access Protocol) Support
  - Supports Hierarchical Organization
- Auto Discovery of IP Phones & Video Phones
- Monitoring Status of Phones

#### Miscellaneous\*

- Distinctive Ring by Calling User
- Auto Config & Upgrade
- Personal Directory
- Downloadable Ring
- Do not Disturb





#### IPNext500 Next Generation IP-PBX System

#### Conference

- G.711 (4-party Conference, 2 session) : Basic
- Ad-hoc Conference
- Dial-Out Conference
- Meet-me Conference
- Multiple External MCU support( Video, Audio, etc) : AddPac AP-MC1000, etc
- Conference Chair and Participants Management

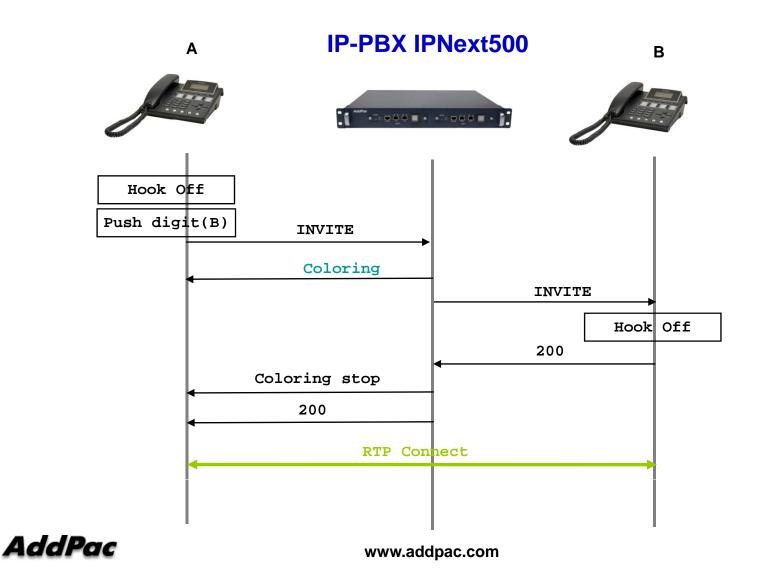
#### Music & Announcement

- Music on Hold
- Replaceable Announcements
- Dialing Music / Tone Service

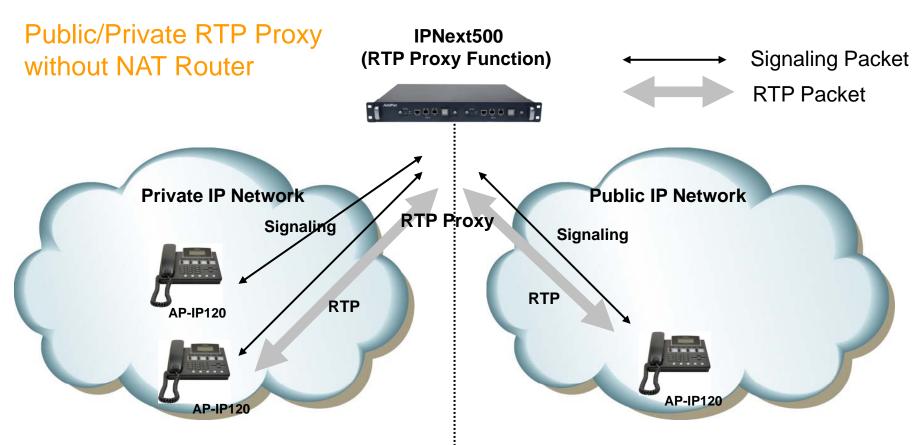


# IP Telephony Basic Call Scenario

IPNext500 Next Generation IP-PBX System

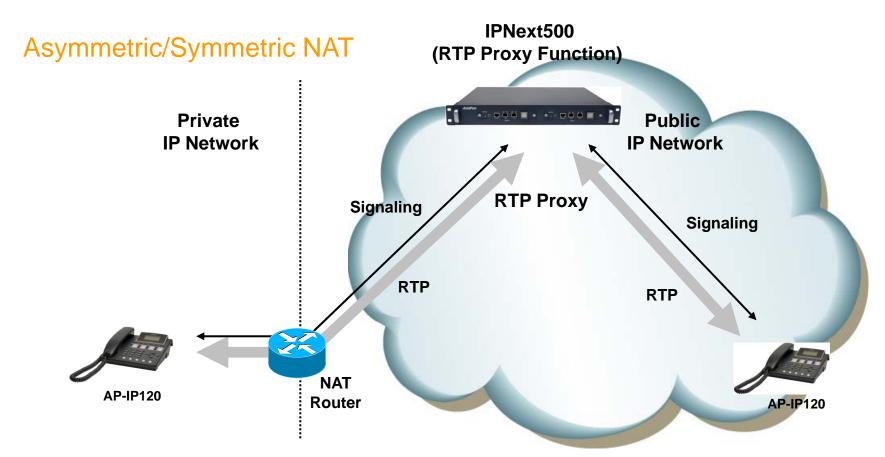


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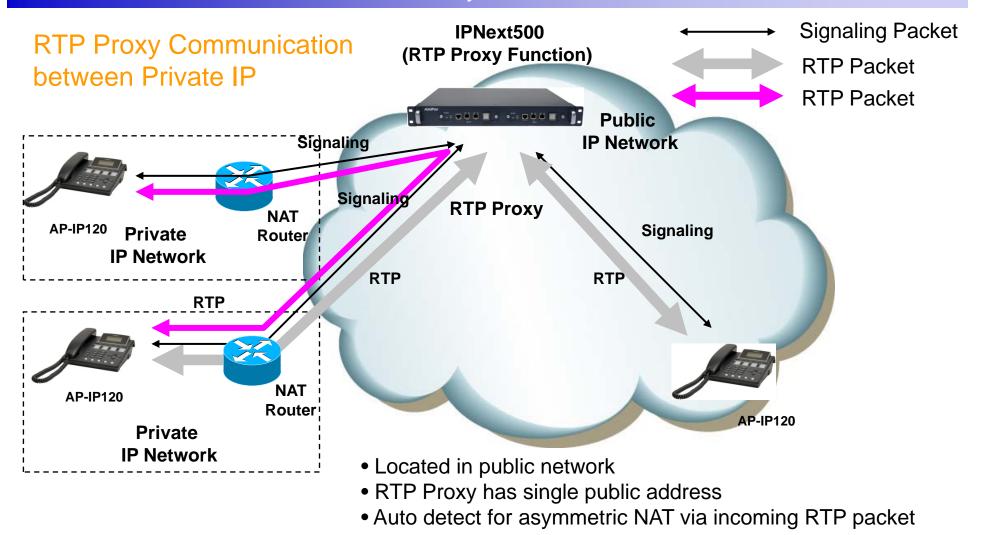
- Located between public and private network
- IPNext500(Call manager + RTP proxy) has public and private address
- IPNext500 determine that the call is internal or external





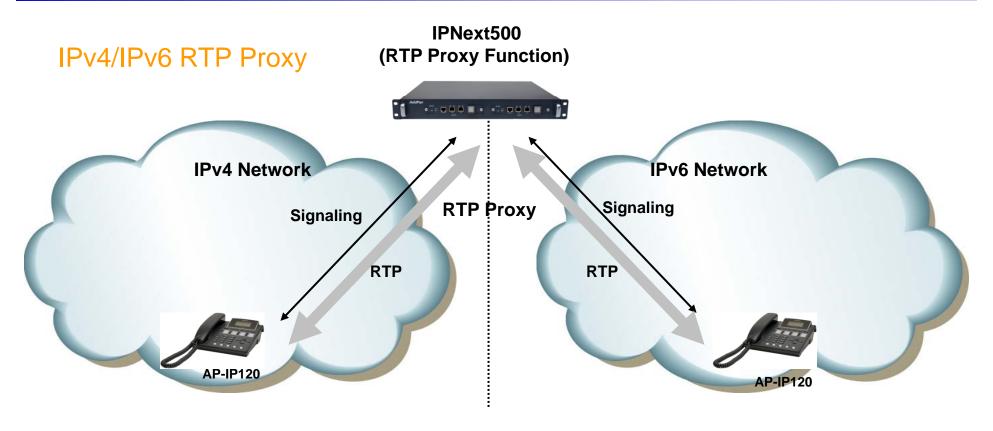
- Located in public network
- RTP Proxy has single public address
- Auto detect for asymmetric NAT via incoming RTP packet







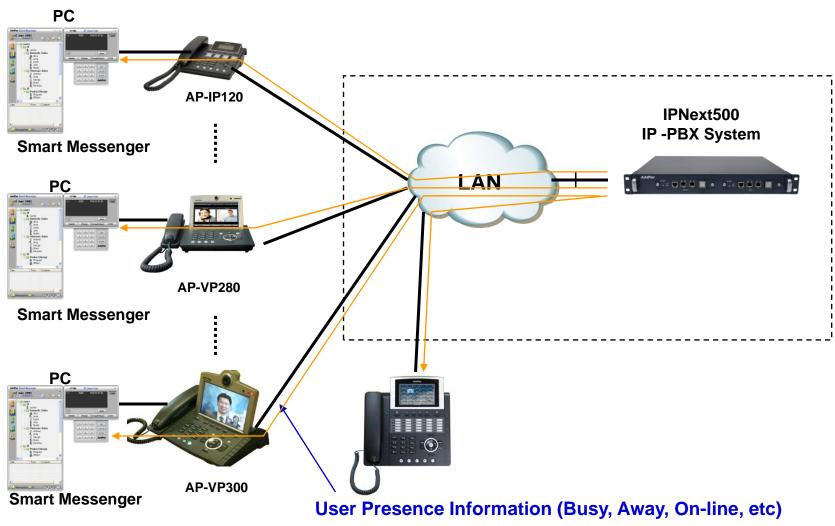
IPNext500 Next Generation IP-PBX System



• IPNext500(Call manager + RTP proxy) has IPv4 and IPv6 address



### User Presence Service for UC



**IPNext500 Next Generation IP-PBX** 

#### **Basic Network Protocols**

- ARP, IP, IPv6, TCP, UDP, ICMP, ICMPv6, SCTP, IGMP, MLD

#### **Routing Protocol**

- IPv4 : Static

- IPv6 : Static

#### **Service Protocol**

- FTP, Telnet, TFTP, DHCP Server/Relay, SNMP Server
- CDP (Cisco Discovery Protocol)
- DNS Resolver , DDNS(nsupdate)
- Bridge
- Syslog
- IP/IPv6 policy control (QoS)
- VPDN (Virtual Provate Dial-up Network : L2TP Server)



**IPNext500 Next Generation IP-PBX** 

#### IPv4/IPv6 Interworking

- NAT/PAT for IPv4
- IP connect (formerly ip-share) and device cascade for IPv4
- IP/IP, IP/GRE tunneling
- NAT-PT
- 6to4, Autoconfig tunneling

#### **IPv4 Address Configuration**

- Fixed (Static)
- DHCP
- PPPoE

#### **IPv6 Address Configuration**

- Fixed (Static)
- EUI-64
- Autoconfig (Neighbor Advertisement and Solicitation)

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IPNext500 Next Generation IP-PBX

#### **Miscellaneous**

- Standard & Extended IPv4/IPv6 Access List
- Multi-level User Account Management
- IP accounting
- fsh (Embedded file system shell)
- STUN Client



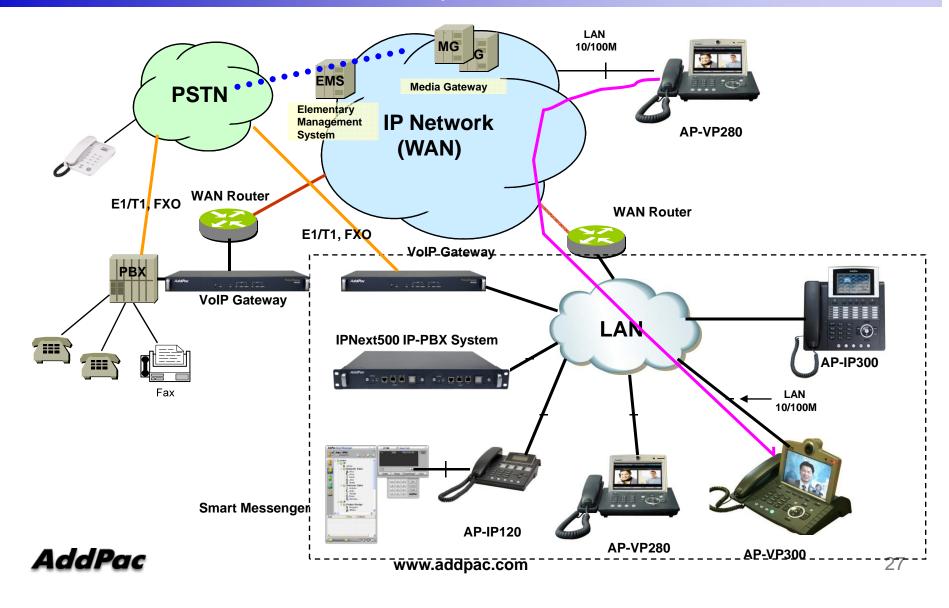
IPNext500 Next Generation IP-PBX

#### **SNMP MIBs**

- MIB-II
- RMON MIBs (Statistsics, History, Alarm, Hosts Group)
- RFC2465 Management Information Base for IP Version 6: Textual Conventions and General Group
- RFC2466 Management Information Base for IP Version 6: ICMPv6 Group
- RFC2452 IP Version 6 Management Information Base for the Transmission Control Protocol
- RFC2454 IP Version 6 Management Information Base for the User Datagram Protocol
- AddPac Enterprise MIBs
- etc



# Standard IP-PBX System Application



# Ordering Information

#### IPNext500 Next Generation IP-PBX Hardware

- IPNext500 IP-PBX Main Body
- High Performance CPU board (Hot-Swap)
- 2-ports Gigabit Ethernet and 1-port RS-232C Console
- Including Network Cable Set & Internal Power Supply, etc.
- Built-in Dual Power Supply
- Additional CPU board for Fault Tolerant (option)
- Built-in APOS Internetworking Software for IPNext500
- Including 1 Year Hardware Warranty
- Product Documents
  - Install and Operation Guide (PDF)
- Pricing
  - AddPac Technology Regional Sales Manager
  - Authorized Sales and Marketing Representatives
  - Please Contact www.addpac.com



# Thank you!

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