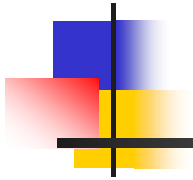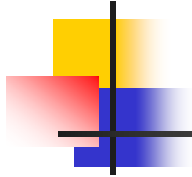# AP160 Dial-Up VoIP Gateway
Design Features & Concept

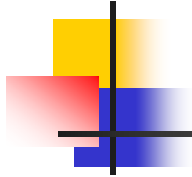**2003. 2.**

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Contents

❑ **Design Features**

❑ **Design Block Diagram**

❑ **Design Specifications**

❑ **AP160 Series Easy Setup Concept**
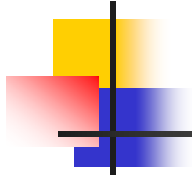
❑ **Discussion**

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Design Features

❑ **AP160 Series Specific H/W Features**
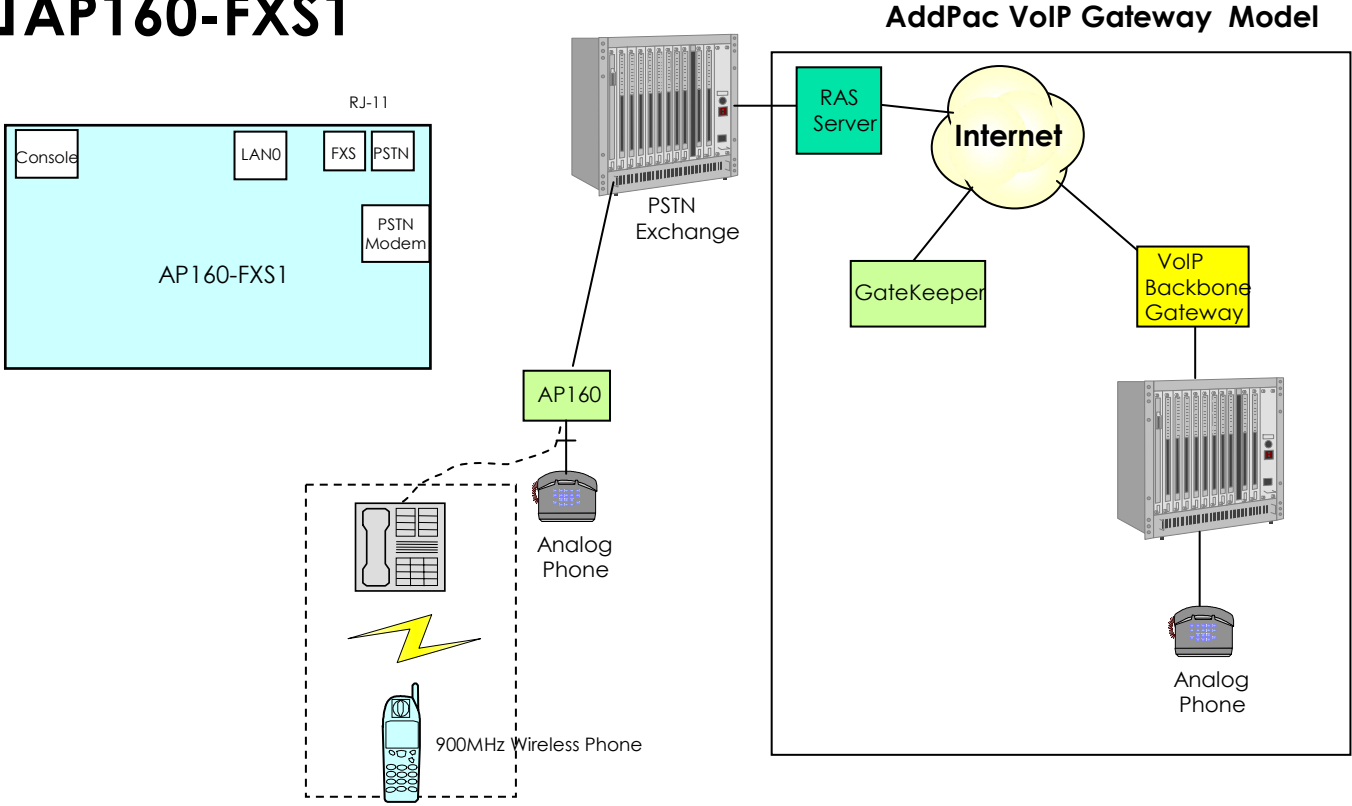- AP160-FX1 : 1 FXS Port, LAN0 (optional)

❑ **AP160 Series Common H/W Features**
- CPU : 32Bit RISC Microprocessor
- DSP : High Performance DSP
- Main Memory : 16Mbyte SDRAM
- Flash Memory : 2Mbyte
- One(1) PSTN + Modem Port
- Console Port : RJ-45
- Real Time Clock

Design Features

❑AP160-FXS1

AddPac VoIP Gateway Model

RJ-11

Console | LAN0 | FXS | PSTN

PSTN Modem

AP160-FXS1

PSTN Exchange

RAS Server

Internet

GateKeeper

VoIP Backbone Gateway

AP160

Analog Phone

900MHz Wireless Phone

Analog Phone

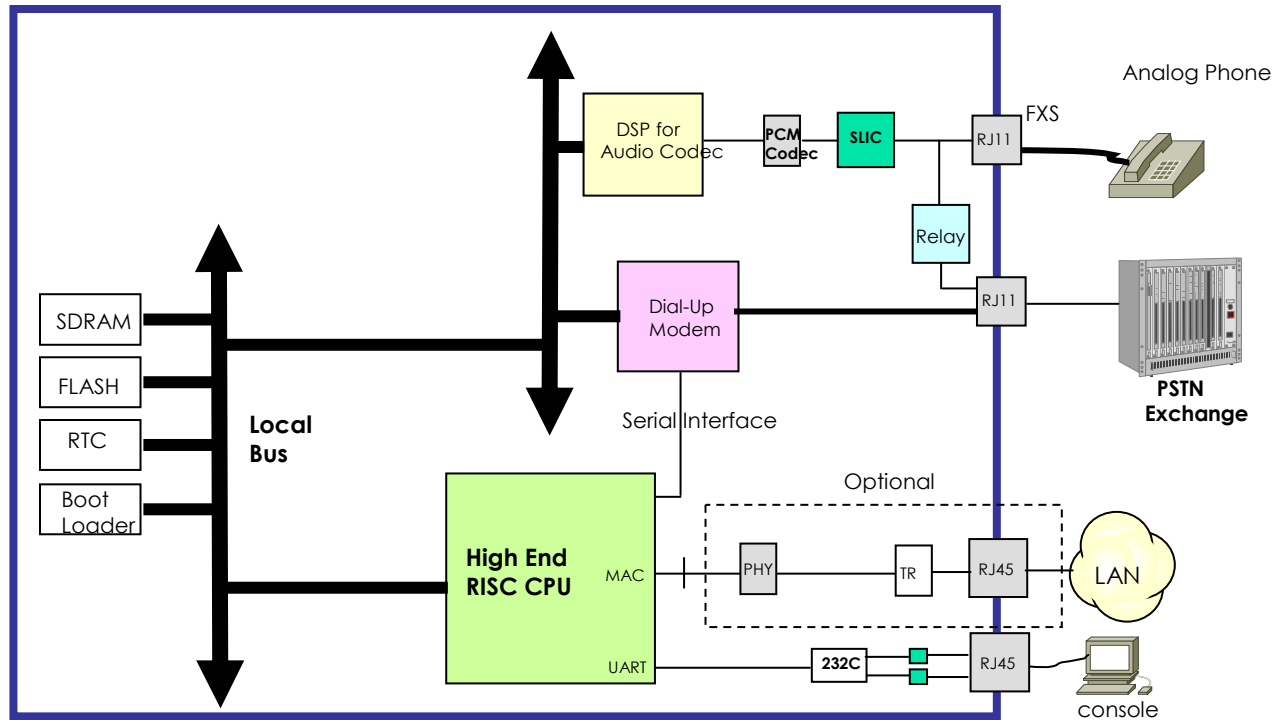# Design Features

❑ System Block Diagram (Logical Diagram)

Design Specifications

❑AP160 Series Specification

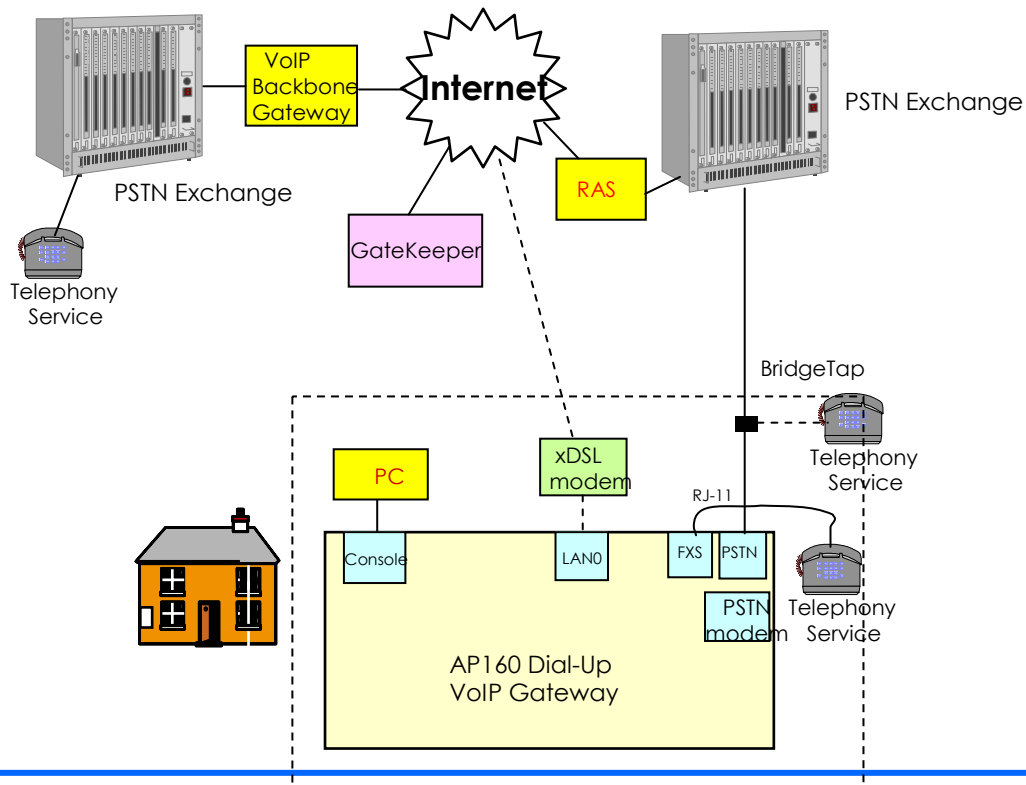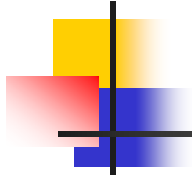| WAN Protocols	Point-to-Point Protocol(PPP) for Dial-up modm
Voice over IP Services	ITU-T H.323 v2 VoIP protocol with ITU-T H.235 Security Features
	G.723,G.729A,G.711 Voice Compression
	Voice Processing Features : VAD, DTMF, CNG,G.168 and T.38 Fax Relay
	Enhanced QoS Management Features for Voice Traffics
Network Managements	Standard SNMP Agent (MIB v2) Support
	Remote Management using Console, Rlogin, Telnet
	Web based Managements using HTTP Server Interface
	Traffic Queuing
Security Functions	Standard & Extended IP Access List
	Enable/Disable for Specific Protocols
	PPP User Authentication Supports : PAP, CHAP
Operation & Management	System Performance Analysis for Process, CPU, Connection I/F
	Configuration Backup & Restore for APOS Management
	Debugging, System Auditing, and Diagnostic Support
	System Booting and Auto-rebooting with Watchdog Feature
	System Managements with Data Logging
	IP Traffic Statistics with Accounting

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Design Specifications

❏ AP160 Series S/W Features (continue..)

Other Usable Features	DHCP Server & Relay Functions
	Network Address Translation (NAT) Function
	Port Address Translation(PAT) Function
	Transparent Bridging (IEEE Standard) Function - Spanning Tree Bridging Protocol Support - Remote Bridging Support - Concurrent Routing and Bridging Support
	Command Line Interface(CLI)
	Remote Upgrade for APOS management using FTP/TFTP

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AP160 Series PSTN Inter-Working

❑ PSTN Inter-Working Architecture

Discussion