

A large, abstract background graphic with a blue color palette. It features overlapping geometric shapes, including triangles and circles, and is populated with numerous small white dots and circles of varying sizes, creating a sense of depth and movement.

## Multimedia Processing & Signaling (VoIP & PSTN convergence communication)



# SHN Series

## VoIP Media Processing & Signaling

With VoIP being an integral part of modern communication technologies, many application developers have been introducing next-generation multimedia processing and signaling technologies to deliver cost effective, flexible, high performance IP-based services or applications. Extending mature PSTN technologies to IP architecture, Synway's SIP-based media processing hardware platform is specifically designed to deliver robust enabling architecture in pure IP environment or hybrid IP and PSTN networks for service providers and application developers.

Like Synway's PSTN architecture, Synway's IP hardware architectures incorporate high capability and high performance media processing resources, including echo cancellation, fax, conferencing, high compression protocols, and call control, which enable service providers and communication application developers to rapidly deliver feature-rich IP-based services, including SIP media server, hosted call center, voice portal, IP messaging and gateway.

For pure IP-based services or applications, Synway's IP platform offers matchless cost efficiency, rich multimedia processing, and SIP. Application developers can develop high-capability, size-optimized-for-value IP system, with NIC-based port densities up to 1920 ports in a single system. In the hybrid IP and PSTN networks, this platform inherits and shares API from Synway's PSTN series products, and simplifies development and deployment as developers can rapidly migrate their existing applications or services interfaced to Synway's PSTN series products to this IP architecture.

## Key Features & Benefits

- ALL-IN-ONE architecture of integrated SIP and multimedia processing

Help VoIP-based application developers to integrate all cost effective, scalable, feature-rich IP telephony applications and value-added services in single box in IP networking environments.

- Signaling protocols: SIP/MGCP

Offer robust SIP signaling technologies for service providers and application developers to develop and deploy high capability, high performance and highly available enhanced services in PSTN and PLMN networks.

- Universal user-friendly SHCTI API supports for a range of calling features

Unified API architecture minimizes efforts on application development and deployment, and PSTN-based or SIP-based applications can be migrated among all of Synway's hardware platforms.

- Optional form factor: PCI, PCI-X\*, PCI-express\* interface

Support existing or next-generation form factor of network infrastructure, server or chassis without altering application programming interfaces.

- Rich media processing: conferencing, compression, fax, echo cancellation, call control, etc.

Support for enhanced multimedia processing resources, including conferencing, IVR, fax, compression, echo canceller, call control, help developers develop feature-rich applications, such as IVR, call center, conferencing, gateway, IP-PBX and other highly available solution architectures.

- Global approval by service providers, application developers and system integrators

Deployed into large-scale call center application, value-added service, unified messaging solution by world-class application developers and service providers.

- Scalable and upgradeable up to 120 ports per slot, maximum 960 ports per system

Cost effective, scalable and upgradeable hardware for a broad range of applications, and specifically designed to fulfill demands in high capacity, highly available and redundant system architecture.

## Technical Specifications

- PRODUCT MODELS

SHN-8B-CT/PCI+  
SHN-16B-CT/PCI+  
SHN-32B-CT/PCI+  
SHN-60B-CT/PCI+  
SHN-120B-CT/PCI+

- INTERNET INTERFACE

Speed: 10/100M Compatible  
Interface: RJ45

- RECORDING/PLAYING FORMAT

A-Law,  $\mu$ -Law, ADPCM

- MAXIMUM SYSTEM CAPACITY

Theoretically up to 8 VoIP boards concurrently per system

- AUDIO CODEC

MS-GSM, G.729A, A-LAW,  $\mu$ -Law

- POWER REQUIREMENTS

Maximum power consumption:  $\leq 13W$

- ENVIRONMENTAL CONDITIONS

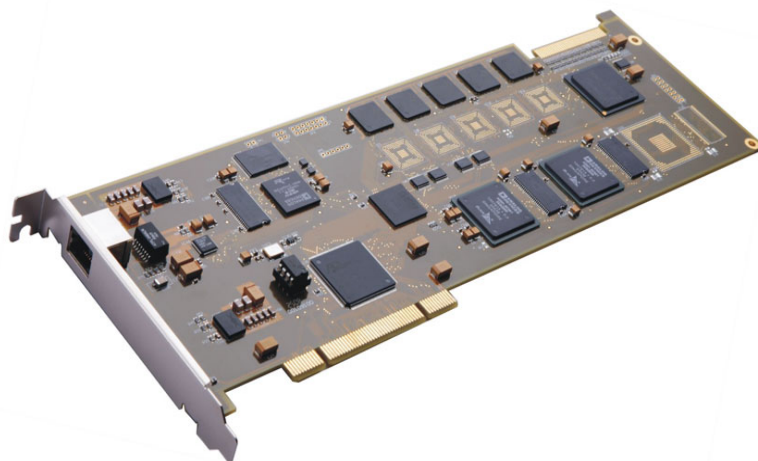
Operating temperature: 0°C-55°C  
Storage temperature: -20°C-85°C  
Humidity: 8%-90% non-condensing  
Storage humidity: 8%-90% non-condensing

- AUDIO ENCODING & DECODING

|           |          |            |        |
|-----------|----------|------------|--------|
| 16Bit PCM | 128kbps  | 8Bit PCM   | 64kbps |
| A-Law     | 64kbps   | $\mu$ -Law | 64kbps |
| VOX       | 32bps    | ADPCM      | 32kbps |
| GSM       | 13.6kbps | Mp3        | 8kbps  |
| G.729A    | 8kbps    |            |        |

- SAFETY AND CERTIFICATIONS

Lightning Resistance: Level 4  
Certifications: FCC, CE & CCC

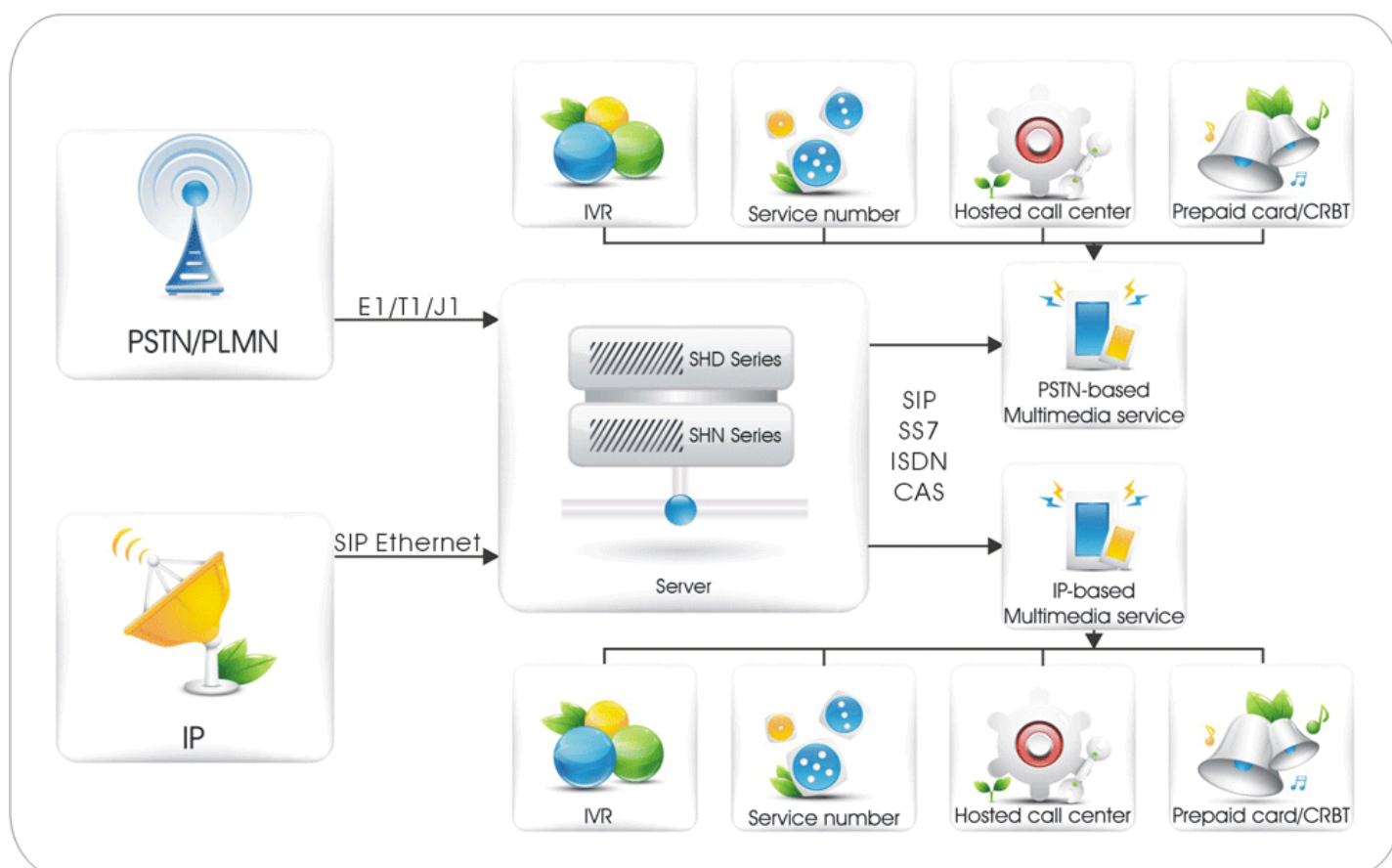


# APPLICATION DIRECTORY

## Multimedia processing & signaling convergence in IP & PSTN networks

Synway leverages years of expertise in traditional and next-generation signaling and multimedia processing technologies to provide service providers and application developers with robust hardware components for gateway and media processing applications. Synway's architecture, combined together, evolutionally converge communication technologies for PSTN and IP networks and offer more features that traditional media gateway delivers, including a broader range of signaling technologies and powerful media processing capabilities.

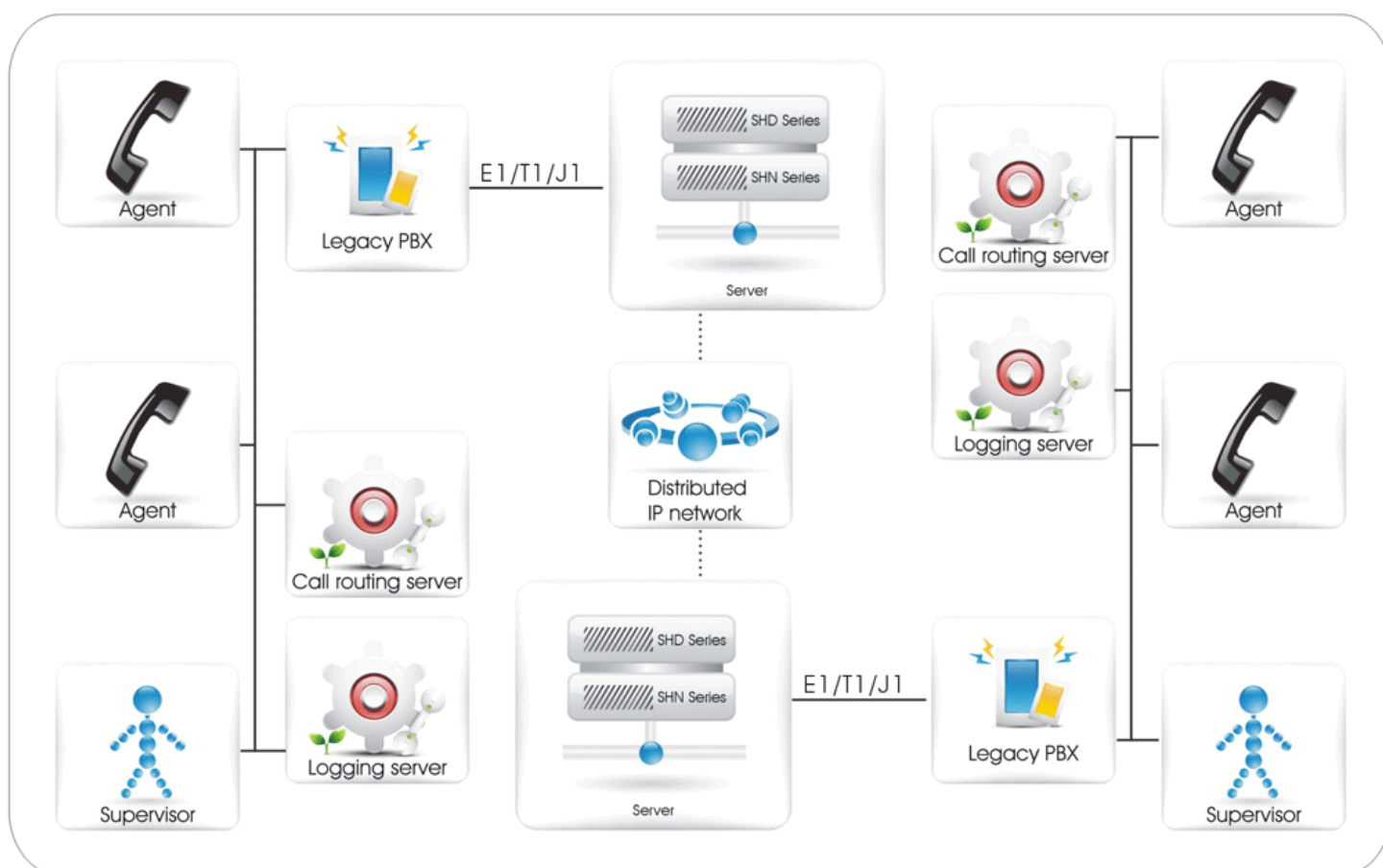
Talking advantaging of Synway's components, Telco, enterprises and carriers can benefit from an array of combined sophisticated application platforms, not only gateway functionality from PSTN to IP through converting a variety of SS7 packets, ISDN variants and(or) CAS into SIP protocols, but rich media processing capabilities, including fax, compression, echo canceller, and conferencing used for IP gateway, media server, IVR, hosted call center, media streaming, conferencing, fax server and more. With this innovative convergence of IP and PSTN access technologies, service providers and application developers can deliver matchless cost, function-rich, highly adaptive applications or services in single box to market more rapidly.



## Gateway & media processing for multinational enterprise

Utilizing Synway's IP and PSTN hardware platforms with unified API and SDK, developers or service providers can load SIP, SS7 ISDN PRE and CAS protocols in a box and simply migrate applications between IP and PSTN platforms. This convergence can act as an inter-working device or gateway between an IP-based network and legacy PBX. Usually, legacy PBX is a substantial infrastructure investment, and access to PSTN-based service is less cost effective.

To take full advantage of cost effective, feature-rich SIP-based services and expensive legacy PBX in IP and PSTN networks, evolutionary combination of Synway's IP and PSTN architectures is valuably practical. That makes communications more cost effective from IP phones to traditional phones, or from traditional phone to traditional phone (two gateways implemented on two end points). Interconnecting IP network with legacy PBX, Synway's IP and PSTN-based technologies save enterprise and telecom equipment manufactures(TEM), call center designers, or system integrators much cost of communication trunks.



**For more.....**  
**[Http://ww.synway.net](http://www.synway.net)**



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