Synway
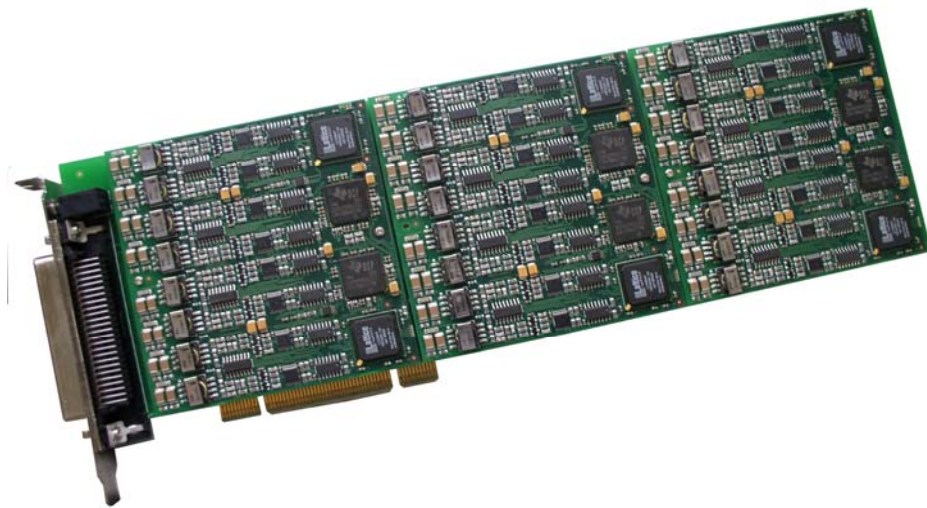
Synway DST Series

SHR-24DA-CT/PCI

Digital Station Tap Board

Product Introduction

Synway Information Engineering Co., Ltd

www.synway.net

Functions

- High-impedance recording of digital phone lines through parallel connection

- A variety of ways to start/stop recording

- Supports simultaneous recording on 24 channels, each with a different format

- Supports independent-recording of incoming, outgoing and mixed-recording modes

- ANI and DNIS support

- Synchronous acquisition of the information displayed on digital phones during recording

- Detects all modes of keying supported by user phones

- Activity/silence detection

- Automatic Gain Control (AGC) support in recording operation

- Call progress monitoring

- Automatically checks board to see if modules are correctly inserted and to determine the number of modules on the board

- Supports line-fault detection for digital station tap boards and digital phones

Characteristic Features

- **PCI 2.1 Bus Support**

  Includes PCI 2.1 bus with burst data transmission rate up to 133 MB/s; PNP (plug and play) feature eliminates the need for jumper leads; supports PCI-X slot.

- **Modularized Design**

  This board is designed with modularized structure and can be configured in flexible ways. Each board can be fitted with up to 3 recording modules, and each module can support recording of up to eight 2-lead or four 4-lead digital phone lines. Now it is widely used in various systems.

- **Available RJ21 Connector**

  This board has a 50-pin RJ21 connector which is often used for PBXes, making connection easy and malfunctions rare. With the help of a 24-port RJ21-to-RJ11 adapter that is supplied with the board, users can use the RJ11 jack for direct connection.

- **Fits Modules via Inter-plane Connectors**

The use of high-precision, streamlined, inter-plane connectors highlights the characteristic compact and highly-reliable advantage of Synway's all-in-one boards.

- **1 to 24 Port Hi-Z Monitoring of Digital Lines**

This board connects to monitored phone lines via high-impedance and parallel connection of 2 or 4-lead lines, with the access points flexibly positioned on communication lines between a digital PBX and some digital phones. In such way, it is widely used for recording multiple digital PBX and phone models.

- **Programmable Tone Detector**

Detects busy, ringback and fax answering tones, offering facility for use with a variety of PBXes and key telephone systems.

- **High-impedance Recording**

The recording impedance is up to 600Ω AC, ruling out interruption on transmission of monitored signals.

- **Instantly-upgradeable Hardware Circuit**

Using instantly-upgradeable hardware circuits, the board can support different models of PBXes and digital phones simply through software reconfiguration, i.e. there is no need to replace any hardware components. So far, a dozen of mainstream PBXes, such as Alcatel, Avaya, NEC, Siemens, Nortel, are supported.

- **Voice Processing & Signaling Analysis**

A single board is capable of processing voices and handling call-signaling analysis, and can constitute a recording system by itself without the need for supplementary boards or external devices.

- **Various CODECs Support**

Offers a large selection of voice CODECs, including hardware-based A-Law (G.711), μ-Law, IMA-ADPCM, G729A, and software-based 16-bit linear PCM, MP3.

- **Supports WAV File**

The recorded speech files can be played simply by the sound card.

- **Audio Output Interface**

This board is equipped with a tone amplifier circuit and an output interface, so it can connect directly to the headset or sound box, play back speech files and monitor a specified channel in real time via a simple function call.

- **TDM Capability**

Includes H.100 bus, facilitating smooth connectivity to three-party boards with H.100 bus for the transfer of acquired voice signals to other devices.

- **Unique Hardware Serial Number**

Each board has a unique hardware serial number written in the firmware to distinguish itself from other boards in a multi-board system. The number is available via an easy function call with applications.

- **Authorization Code Identification Circuit**

The on-board authorization code identification circuit is designed for software safety. Users can apply to our company for the authorization code.

- **Synway's Unified SynCTI Driver Development Platform**

Synway owns the intellectual property rights for the unified high-intelligence SynCTI driver development platform. Each system supports up to 2048 channels. Functions such as the detection and analysis of rings, tones and Caller IDs, are available via simple function calls on the driver platform, without having to understand complex call procedures.

Operation Principle
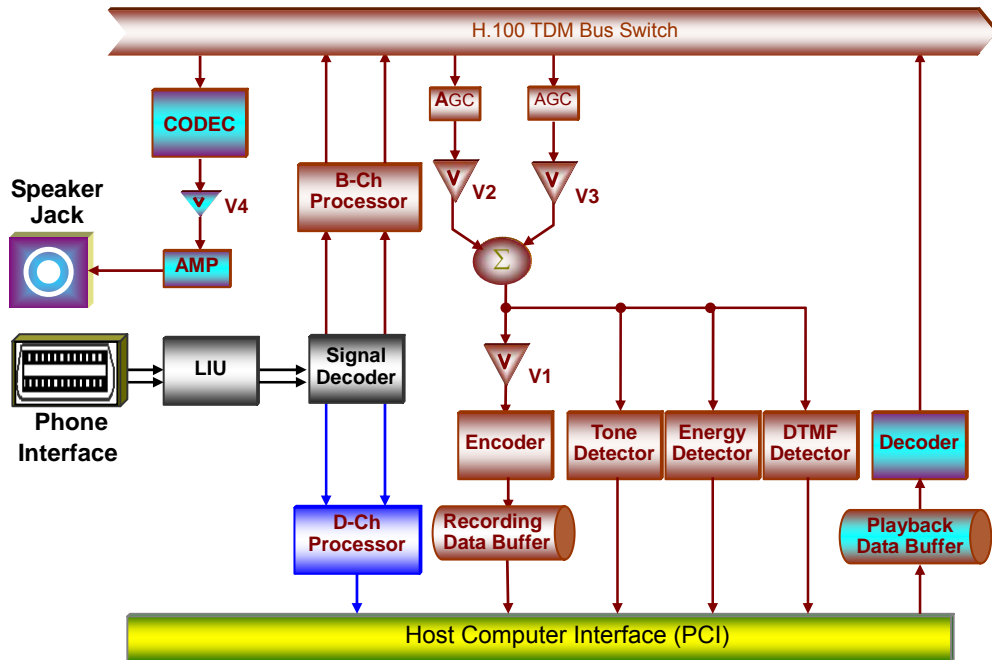
Typical Application
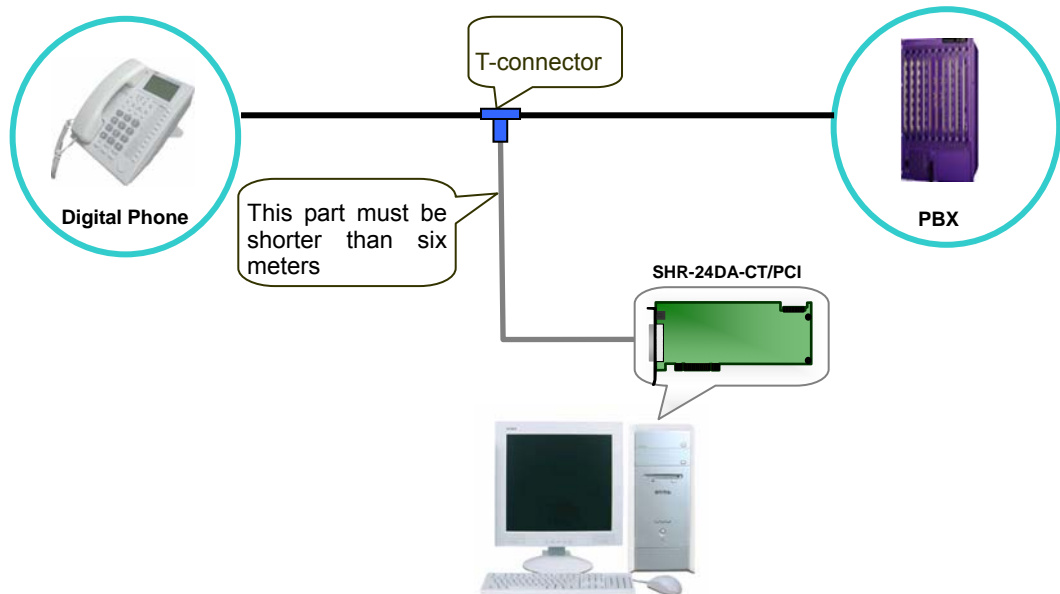
Technical Specifications

Dimensions

310×115mm2 (excluding L-bracket)

Weight

≈ 350g (including 3 recording modules)

Environment

Operating temperature: 0℃—55℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interface

Headset jack: One φ3.5 stereo jack

Telephone line jack: One 50-pin RJ21 connector

Audio Specifications

Codec: CCITT A/µ-Law   64kbps

IMA ADPCM   32kbps

G.729A   8kbps

Output power: ≥50mW

Distortion: ≤2%

Frequency response: 300-3400Hz(±3dB)

Signal-to-noise ratio: ≥38dB

Maximum System Capacity

Up to 10 boards concurrently per system; up to 24 channels per board

Maximum Length of Telephone Lines

Less than 600 meters between digital phones and PBX

Less than 6 meters between line access point and digital station tap board

Power Requirements

Maximum power consumption: ≤12W

Impedance

Input impedance: ≥600Ω AC

Insulation resistance for PC isolation from telephone line: ≥2MΩ/500V DC

Audio Encoding & Decoding

16Bit PCM	128kbps
8Bit PCM	64kbps
A-Law	64kbps
µ-Law	64kbps
VOX	32kbps
ADPCM	32kbps
GSM	13.6kbps
MP3	8kbps
G.729A	8kbps

Sampling Rate

8kHz

Safety

Lightning resistance: Level 4

➤ Purchasing Guide

The Synway DST Series SHR-24DA-CT/PCI digital station tap board provides a complete range of features to meet all requirements.

➢ Board Model and Feature List

Model	PC Bus	Voice Channels	Audio Jack	Conferencing	Between-board TDM
SHR-24DA-CT/PCI	PCI	24	√	√	H.100

➢ Module Type and Feature List

Type	Name	Voice Channels	Connection method	Lines from Board	Supported PBX Models
MOD_24DA	Parallel-recording Module	8	Parallel	2 or 4	Most PBX Models
MOD_24DAS	Serial-recording Module	8	Serial	4	See Note①

Note①: The serial-recording module is especially for such PBX models as Avaya INDeX, Mitel SX200/SX2000* and Siemens Rolm 9751.

➤ Technical/sales Support

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<u>TIPS</u>

- **All the content and data herein have been scrupulously checked. However, we do not guarantee the absence of errors.**
- **Product specifications and relevant data are subject to conditions on the purchase contract.**
- **Our company reserves the right to modify this document without prior notice and the right for final explanation.**