



DTP-120C/PCI, DTP-120C/PCI+

Product Introduction



Functions

- Detection of calling/called party info
- A single board has up to 8 input channels for high-impedance parallel connection and can monitor incoming/outgoing signals to/from up to 4 E1/T1 ports
- Supports China SS1, SS7 (TUP, ISUP) and ISDN call state and voice signal analyses
- Supports independent-recording of incoming, outgoing and mixed-recording modes
- Supports Automatic Gain Control (AGC)
- Supports detection of standard or customized DTMF/single-tone signals
- Activity/silence detection
- The on-board lightning-proof circuit reaches the telecom standard and eliminates the damage caused by the lightning
- Each board has a unique hardware serial number written in the firmware to distinguish itself from other boards and prevent piracy. The number is available via an easy function call with applications
- The on-board authorization code identification circuit is designed for software safety. Users can apply to our company for the authorization code
- Compatible with other series of boards from Synway

➤ Characteristic Features

- **PCIe/PCI Bus Support**

PCIe digital trunk passive boards include PCIe 1.0a bus with the single-way transmission rate up to 2.5Gb, support PCIe x1 slot; PCI digital trunk passive boards include PCI 2.2 bus, use the universal PCI design supporting 3.3V and 5V PCI slots as well as the PCI-X slot; both support the PNP (plug and play) feature which eliminates the need for jumper leads.

- **DMA Transfer Support**

The DMA transfer of recording data does not cost any of host CPU resources, which make the board more suitable to large-capacity application systems.

- **Supports Full Range of Signaling Systems**

Uses the uploadable signaling analysis and processing module, enabling the E1/T1 trunk monitoring under various signaling systems through software configuration without the change of hardware.

- **Various CODECs Support**

Offers a large selection of voice CODECS, including hardware-based A-law (G.711), μ -law, IMA-ADPCM, GSM, MP3 and G.729A, software-based 16-bit linear PCM and VOX.

- **Supports WAV File**

The recorded voice files can be edited and played by audio tools such as Cooledit.

- **High-impedance Connection**

Simply achieved by parallel connection. Very high input impedance rules out any interruption on system operation.

- **Automatic Signal Adaptation**

High signal-adaptation capability allows the flexible choice of an input point on the transmission line.

- **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. All features are available via simple function calls on the driver platform, without having to understand complex call procedures.

➤ Operation Principle

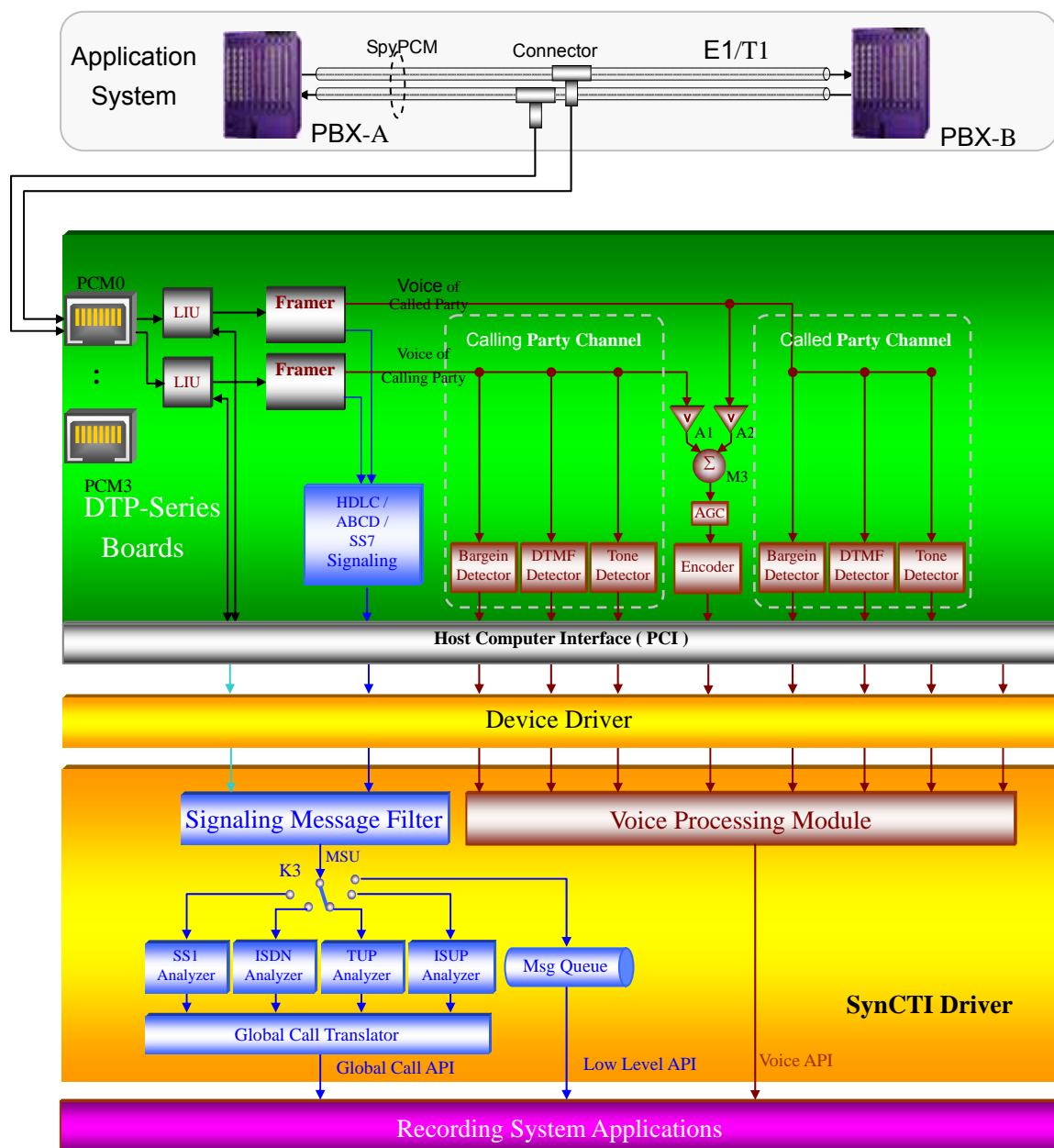


Figure 1 Operation Principle

➤ Typical Application

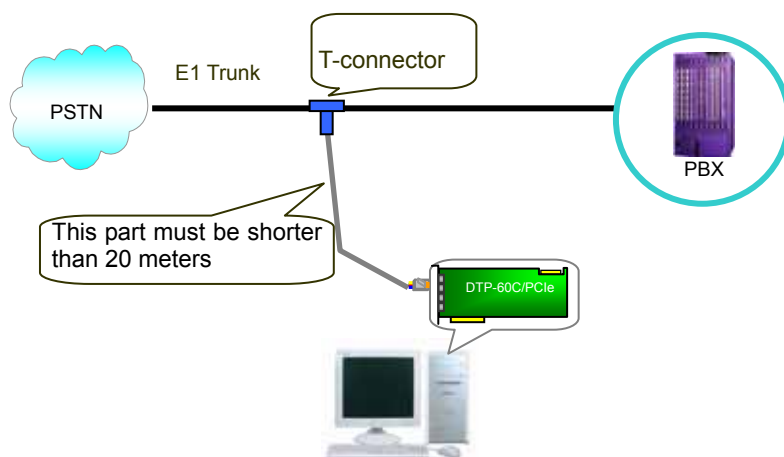


Figure 2 Connection Using Twisted Pair Cable

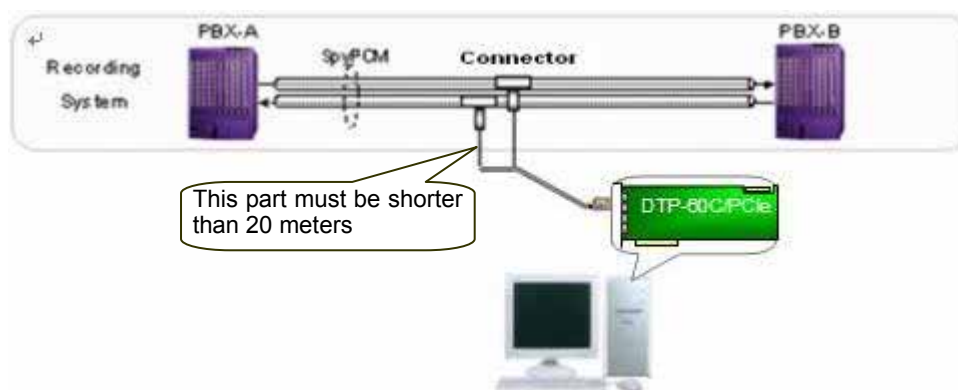


Figure 3 Connection Using Coaxial Cable

Technical Specifications

Dimensions

160×112mm² (excluding L-bracket)

Weight

≈ 110g

Environment

Operating Temperature: 0°C-55°C

Storage Temperature: -20°C-85°C

Humidity: 8%-90% non-condensing

Storage Humidity: 8%-90% non-condensing

Input/output Interface

E1 Physical Ports: compliant with G703, including
75Ω unbalanced interface and
120Ω balanced interface

T1 Physical Ports :DSX-1 and CSU line build-outs
available for different extents
of signal losses, including
100Ω and 110Ω balanced
interfaces

Audio Specifications

CODEC: CCITT A/μ-Law 64kbps

IMA ADPCM 32kbps

G.729A 8kbps

GSM 13.6kbps

MP3 8/16kbps

Frequency Response: 300-3400Hz (±3dB)

Automatic Gain Control (AGC): -20dB-0dB

Signaling

SS1: compliant with international GF002-9002
(DL and MFC)

SS7: compliant with Q771-Q795

DSS1: compliant with Q.933

Maximum System Capacity

Up to 8 boards concurrently per system;
each board can monitor up to 4 E1/T1
trunks

Power Requirements

+3.3V DC: 1.5A

Maximum Power Consumption: ≤5W

Input Impedance and Impedance

Interface: RJ48C

AC Impedance: 1KΩ

Audio Encoding/Decoding

16Bit PCM 128kbps

8Bit PCM 64kbps

A-Law 64kbps

μ-Law 64kbps

VOX 32kbps

ADPCM 32kbps

GSM 13.6kbps

MP3 8/16kbps

G.729A 8kbps

Sampling Rate

8kHz

Safety

Lightning Resistance: Level 4

➤ Purchasing Guide

The Synway DTP Series Digital Trunk Passive boards with PCIe and PCI bus provide a complete range of features to meet all requirements.

➤ Model Description

Model	PC Bus	Digital Trunks	CODECs Support				
			A-law	μ-law	G.729A	GSM	MP3
DTP-30C/PCIe	PCIe	1 E1/T1	√	√	-	-	-
DTP-30C/PCIe+	PCIe	1 E1/T1	√	√	√	√	√
DTP-60C/PCIe	PCIe	2 E1/T1	√	√	-	-	-
DTP-60C/PCIe+	PCIe	2 E1/T1	√	√	√	√	√
DTP-120C/PCIe	PCIe	4 E1/T1	√	√	-	-	-
DTP-120C/PCIe+	PCIe	4 E1/T1	√	√	√	√	√
DTP-30C/PCI	PCI	1 E1/T1	√	√	-	-	-
DTP-30C/PCI+	PCI	1 E1/T1	√	√	√	√	√
DTP-60C/PCI	PCI	2 E1/T1	√	√	-	-	-
DTP-60C/PCI+	PCI	2 E1/T1	√	√	√	√	√
DTP-120C/PCI	PCI	4 E1/T1	√	√	-	-	-
DTP-120C/PCI+	PCI	4 E1/T1	√	√	√	√	√

► Technical/sales Support

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TIPS

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