CDC Series

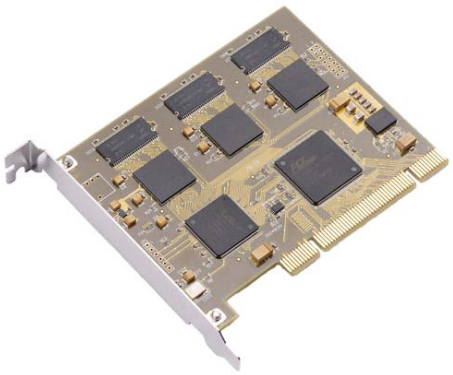
DSP-dedicated transcoding helps you build robust IP or Asterisk-based systems to handle high traffic calling as well as strategic expansion without constrains of host processor.

- Bi-directional transcoding between G.729A and G.711
- 50, 100 and 150 ports available for high-density transcoding

The CDC series is DSP-enabled hardware with dedicated DSP resources for transcoding. Combined with the CDC series, Asterisk, any other open sources or host-based IP platform can handle complex codec translation between G.729A and G.711 (A-law or μ-law) for the purposes of call origination or termination in the hybrid VoIP and TDM networks, with minimal hitting to host CPU.

Under constrain of processor capability, the CDC series leverages dedicated DSP algorithm to help you design versatile, high-scalability open source solutions in complex networking environments where minimal utilization of host processor, high-traffic call processing or system expansion for higher density is required. It not only improves performances of Asterisk-based application, but also eliminates limitation of existing bandwidth. The CDC series has been considered as more cost effective and high-performance transcoding algorithm when compared with CPU's consumption for that purpose.

The PCI-2.2 compliant, half-length CDC series cards are the perfect substitute to Digium's TC400B for its cost advantages and certified DSP algorithm. For a variety of environments, each card is designed to support 50, 100 or 150 bi-directional codecs transformations and be seamlessly compatible with Synway's TEJ and FXM series.



Key features and benefits

Seamlessly compatible with all Asterisk features

The CDC series is perfectly compatible with all Asterisk, helping Asterisk-based applications developers deliver cost-effective, feature-rich and highly accessible solutions.

PCI 2.2 Bus compliant

Includes PCI 2.2 bus with burst data transmission rate up to 132 MB/s; PNP (plug and play) feature eliminates the need for jumper leads; the universal PCI design supports 3.3V/5V PCI slot and PCI-X slot.

DMA data exchange

32-bit bus master DMA data exchanges across PCI interface at 132MB/s for minimum host processor intervention. The use of PCI-based DMA technique for data exchange minimizes utilization of the host CPU.

Transcoding capability

The dedicated DSPs process the codec translations among G.711 A-Law, μ-Law and G.729A, which minimizes consumption of host CPU in all demanding situations and guarantees high scalability when system expansion is required. Each can handle 50, 100, or 150 bi-directional decompression (A-law to G.729A) or compression (G.729A to A-law).

Technical Specifications

Product models

CDC-1522A/PCI, 50-channel bi-directional transcoding

CDC-2522A/PCI, 100-channel bi-directional transcoding

CDC-3522A/PCI, 150-channel bi-directional transcoding

Physical characteristics

Dimensions:120×95mm2 (excluding L-bracket)

Weight: approx. 100g

Environment

Operating temperature: 0℃—55℃

Storage temperature: -20℃—85℃

Humidity: 8%—90% non-condensing

Storage humidity: 8%—90% non-condensing

Audio Specifications

CODEC: CCITT A/μ-Law 64kbps

Distortion: ≤3%

Frequency response: 300-3400Hz (±3dB)

Signal-to-noise ratio: ≥38dB

Echo suppression: ≥40dB

Power Requirements

Maximum power consumption: ≤8W

Audio Decoding

From G.729A to A-Law, μ-Law

Audio Encoding

From A-Law, μ-Law to G.729A

Audio CODEC

A-Law 64kbps

μ-Law 64kbps

G.729A 8kbps

Sampling Rate: 8kHz

Certification

CE, FCC Part 15 Class A and Class B , EN 55022, EN 55044, CISPR 22, CISPR 24

Safety: Lightning resistance: Level 4

Warranty

6-years warranty, refundable 2-month return, lifetime maintenance, free support

Production Quality

ISO 9001:2000

Environment standard

RoHS

About Synway

Synway specializes in providing superior media processing & signaling technologies as well as high-performance CTI components in use for convergence (voice/data/video) communications for CTI software developers and system integrators worldwide. With decades of expertise in voice communications, Synway's offerings, including its robust, versatile CTI hardware and platforms, are applied to design a broad range of TDM or VoIP-based applications and services, such as unified communications, call center, Telco value-added services(SMS/CRBT/DIALING), media gateway, signaling, fax, conferencing, passive call recording, open source applications and more.

For two decades, Synway has consolidated its position as a leading hardware and platform vendor in international market. Having been working with thousands of partners over time across the world, Synway has achieved the robust portfolios for passive call recording applications in call center and financial institutes: the most diverse product ranges, greatest scalability, greatest compliance with multi-protocols and multi-networks, and the most installations worldwide. For Asterisk open-source applications, Synway leverages its patent-owned DSP expertise for data processing, echo cancellation and transcoding, helping solution providers create high-scalability, cost effective, flexible, user-friendly systems. For more information, please visit us at http://www.synway.net or contact us.