

Product Name: Digital Asterisk Card



Class: [Asterisk Card](#)  
Model: RT-420D

RT-420D/220D/120D E1/T1 Digital telephone card for Asterisk:

### Description:

Efficient: Optimization of DMA transmission and hardware switching.

Clock: Support to use a unified clock on each machine. Support the master-slave clock. So several different carriers can be connected simultaneously.

Interfaces: Mix T1/E1 connecting has been supported.

Line codin : HDB3 / AMI / B8ZS

Frame format : CRC4 / non-CRC4 / ESF / D4T1 / E1

HDLC Processing: Independent of the hardware HDLC transceiver

Driver optimization: Specifically optimization for high volume data transmission in drivers.

### Model List

PCI Digital Telephony Cards			
Product Name	4-Ports Digital Telephony card	2-Ports Digital Telephony card	Single port Digital Telephony card
Model	RT-420D	RT-220D	RT-120D
Interface	E1/T1/J1	E1/T1/J1	E1/T1/J1
Channels	1-4	1-2	1
Echo Canceller	Support	Support	Support
BUS	PCI 2.2 3.3/5V	PCI 2.2 3.5/5V	PCI 2.2 3.5/5V

This series provides full-duplex telephone card data with 1 6.384M transfer rate or 120-channels voice communications. Each machine can support multiple cards, particularly suitable for the development of Asterisk-based applications.

The card provides a wealth of line encoding (AMI / BSZS / HDB3), hardware frame processing(CRC4 / non-CRC4 / ESF / D4T1 / E1). Every card provides two independent HDLC transceiver and support SS7 FISU transmit-receive. The card also provides two independent Jitter Attenuator.

The card reserved slot for echo cancellation. Carrier-grade EC modules have been provided. The EC module also can provide optimizing of voice quality.

These cards supporting rich media processing with high performance. All the cards in one host can share the same clock source?

The card provides 32bits transmission in both DMA slave and master mode. The data in every DMA transmission can be adjusted according to different motherboard to reach the maximum.

This series cards including 3 models: RT420D/RT220D/RT120D, corresponding to 4, 2, 1 E1 / T1 / J1 interfaces. RT420D is 9.5 CM long, 10 CM high and compliance with PCI 2.2 standard interface card. EC module can be inserted to the slot on the card to provide hardware echo cancellation.

The optimization driver has been provided and has passed our rigorous testing..

### Technical Specification:

Digital Telephony Card Technical Specifications	
Size	9.5*10CM, Half-length standard industry pci card. Weight 200g
Configure	RT420D 4-ports E1/T1/J1
	RT220D 2-ports E1/T1/J1
	RT120D Single port E1/T1/J1
PCI	Auto adaptive to 5v and 3.3v PCI 2.2 bus. Auto configuration and compatible with popular mainboards.
	32bits, 132M bytes/sec DMA transmission and supporting both slave and master mode. DMA transmission can be optimized according to mainboard.
PHY	RJ45 120/75ohm DSX-1/CSU-1 Line-buildouts
Framer	Two Standalone framer to process receive and transmit frame. Supporting Frame formats: CRC4/non-CRC4/ESF/D4T1/E1
	Automatic produce DS1 idle code. Supporting T1.403-1998. Producing and checking RAI-CI/AIS-CI/RAI.
	RCL, RLOS, RRA, RAIS warning interrupt
Standards	ANSI: T1.403-1995, T1.231-1993, T1.408 AT&T: TR54016, TR62411 ITU: G.703, G.704, G.706, G.736, G.775, G.823, G.932, I.431, O.151, Q.161 ITU-T: Recommendation I.432-3/93 B-ISDN User-Network Interface Specification: ETSI: ETS 300 011, ETS 300 166, ETS 300 233, CTR12, CTR4 Japanese: JTG.703, JTI.431, JJ-20.11 (CMI Coding Only)
Environment	Temperature range: 0 ~ 50C
Leds	One tri-colors led for every interface. Total leds: 4