



ATCOM[®] Analog Card AXE-800P

Product Guide

Version: 1.1



The Installation of AXE-800P with Centos 6.0

Content

CONTACT ATCOM	2
CHAPTER 1 THE INTRODUCTION OF AXE-800P	. 3
CHAPTER 2 HARDWARE INTRODUCTION	.4
CHAPTER 3 SOFTWARE INSTALLATION	6
CHAPTER 4 SOFTWARE CONFIGURATION	. 8
CHAPTER 5 REFERENCE	11



Contact ATCOM

The Introduction of ATCOM

Founded in 1998, ATCOM technology has been always endeavoring in the R&D and manufacturing of the internet communication terminals. The product line of ATCOM includes IP Phone, USB Phone, IP PBX, VoIP gateway and Asterisk Card.

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ATCOM Wiki Website: <u>http://www.openippbx.org/index.php?title=Main_Page</u>

Download Center: http://www.atcom.cn/download.html



Chapter 1 the Introduction of AXE-800P

Overview of the AXE-800P

AXE800P Asterisk card is the telephony PCI-E card that supports up to eight FXO/FXS ports. Using AXE800P analog card, open source Asterisk PBX and stand alone PC, users can create their SOHO telephony solution which include all the sophisticated features of traditional PBX, and extend features such as voicemail in IP PBX. The FXO and FXS modules are interchangeable to suit various requirements.

Features

Analog card for Asterisk PBX Support Asterisk PBX, zaptel and dahdi driver Support up to 8 FXO/FXS analog port Suitable for SOHO PBX / VoiceMail / IVR. Caller ID and Call waiting Caller ID Conference

Applications

IP PBX IVR system Traditional Calls/VoIP Calls Conference

Hardware requirement

500-Mhz Pentium III 64MB RAM 3.3V or 5V PCI 2.2 slot

PCI card dimension:

264mm (length) \times 121mm (height)



Chapter 2 Hardware Introduction

Hardware Configuration

Motherboard: AXE-800P

Dual ports FXS module: AX-210S Dual ports FXO module: AX-210X One FXS port and one FXO port module: AX-210XS Splitter: SP400

Customers can use the combination of AX-210S, AX-210X, AX-210XS modules according to their requirements. One AX-210S module supports two FXS ports, one AX-210X module supports two FXS ports, One AX-210XS module supports one FXS port and one FXO port.

Attention:

If you want to use FXS port with AX800P, you have to provide 12V power for the card. If you want to use any module with AXE800P, you have to provide 12V power for the card. Please download the dahdi-linux for the card in atcom website.

Warning:

Please do not plug and unplug the card and modules when the PC power is on.









Figure 2: AX-210S



Figure 3: AX-210XS



Figure 4: AX-210X



Figure 5: SP400



Chapter 3 Software Installation

Test Environment:

asterisk-1.6.2.6 dahdi-linux-complete-2.4.1.2+2.4.1 Centos 6.0 AXE-800P+4AX-210X

After inserting the card into your PCI slot and boot your server, please use the "lspci -vv" command to check the PCI bus compatibility. The correct output will like the following:

05:04.0 Communication controller: Tiger Jet Network Inc. Tiger3XX Modem/ISDN interface

A Tiger Jet device will be found, if you can not see the Tiger Jet device, please poweroff your server and try another PCI slot, if it still does not help, you have to check the compatibility issue between the card and your PCI bus.

- To install asterisk and dahdi, we have to install the following prerequisite packages: bison bison-devel zlib zlib-devel openssl openssl-devel gnutls-devel gcc gcc-c++ Please use the yum install command to install the above packages.
- 2. Download asterisk,dahdi-linux-complete [root@localhost src]# wget http://downloads.asterisk.org/pub/telephony/asterisk/releases/asterisk-xx [root@localhost src]# wget http://www.atcom.cn/cn/download/cards/ax800p/dahdi-linux-complete-2.4.1.2+2.4.1-3.0.tar.g Z_
- 3. Install asterisk,dahdi-linux-complete Install dahdi-linux-complete
 - 1) [root@localhost src]# tar -zxvf dahdi-linux-complete-2.4.1.2+2.4.1-3.0.tar.gz
 - 2) [root@localhost src]# cd dahdi-linux-complete-xxx+xxx
 - 3) [root@localhost dahdi-linux-complete-xxx+xxx]# make
 - 4) [root@localhost dahdi-linux-complete-xxx+xxx]# make install
 - 5) [root@localhost dahdi-linux-complete-xxx+xxx]# make config



Install asterisk

- 1) [root@localhost src]# tar -xvzf asterisk-xxx.tar.gz
- 2) [root@localhost src]# cd asterisk-xxx
- 3) [root@localhost asterisk-xxx]# ./configure
- 4) [root@localhost asterisk-xxx]# make
- 5) [root@localhost asterisk-xxx]# make install
- 6) [root@localhost asterisk-xxx]# make samples



Chapter 4 Software Configuration

- Please check if the AXE-800P driver has been loaded successfully, run cat /proc/interrupts command and you should see one line with "ax1600p".
 If you can not see "ax1600p", you can try to poweroff your server and replug AX-1600P into another PCI slot.
- Please use the "dahdi_genconf" command to configure the /etc/dahdi/system.conf file and generate /etc/asterisk/dahdi-channels.conf file.
 [root@localhost ~]# dahdi_genconf
 It does not show any output if dahdi_genconf run successfully.

```
system.conf
      _____
# Span 1: WCTDM/16 "Wildcard TDM400P REV E/F Board 17" (MASTER)
fxsks=1
echocanceller=mg2,1
fxsks=2
echocanceller=mg2,2
••• •••
... ...
fxsks=7
echocanceller=mg2,7
fxsks=8
echocanceller=mg2,8
# Global data
loadzone
            = us (According to your country)
defaultzone
            = us (According to your country)
------
```



dahdi-channels.conf

; Span 1: WCTDM/16 "Wildcard TDM400P REV E/F Board 17" (MASTER) ;;; line="1 WCTDM/16/0 FXSKS" signalling=fxs_ks callerid=asreceived group=0 context=from-pstn channel => 1 callerid= group= context=default

;;; line="7 WCTDM/16/6 FXSKS (SWEC: MG2)" signalling=fxs_ks callerid=asreceived group=0 context=from-pstn channel => 7

callerid= group= context=default

;;; line="8 WCTDM/16/7 FXSKS (SWEC: MG2)" signalling=fxs_ks callerid=asreceived group=0 context=from-pstn channel => 8 callerid= group= context=default



[root@localhost ~]# dahdi_cfg -vv The right output of running dahdi_cfg -vv will like the following: DAHDI Tools Version - 2.4.1 DAHDI Version: 2.4.1.2 Echo Canceller(s): MG2 Configuration

Channel map:

Channel 01: FXS Kewlstart (Default) (Echo Canceler: mg2) (Slaves: 01) Channel 02: FXS Kewlstart (Default) (Echo Canceler: mg2) (Slaves: 02) Channel 7: FXS Kewlstart (Default) (Echo Canceler: mg2) (Slaves: 07) Channel 8: FXS Kewlstart (Default) (Echo Canceler: mg2) (Slaves: 08) 8 channels to configure. Setting echocan for channel 1 to mg2 Setting echocan for channel 2 to mg2 Setting echocan for channel 7 to mg2 Setting echocan for channel 8 to mg2

- 3. Please add the following line in the end of chan_dahdi.conf file #include dahdi-channels.conf
- Please run asterisk with the following command: asterisk –vvgc reload

5. Please run dahdi show channels command

The right output should like the following:

Chan Extension	Context	Language	MOH Interpret	Blocked	State
pseudo	default		default		In Service
1	from-pstn		default		In Service
2	from-pstn		default		In Service
•••					
•••					
7	from-pstn		default		In Service
8	from-pstn		default		In Service



Chapter 5 Reference

http://www.asterisk.guru.com/ http://www.asterisk.org/downloads http://www.openippbx.org/index.php?title=Main_Page http://www.atcom.cn/