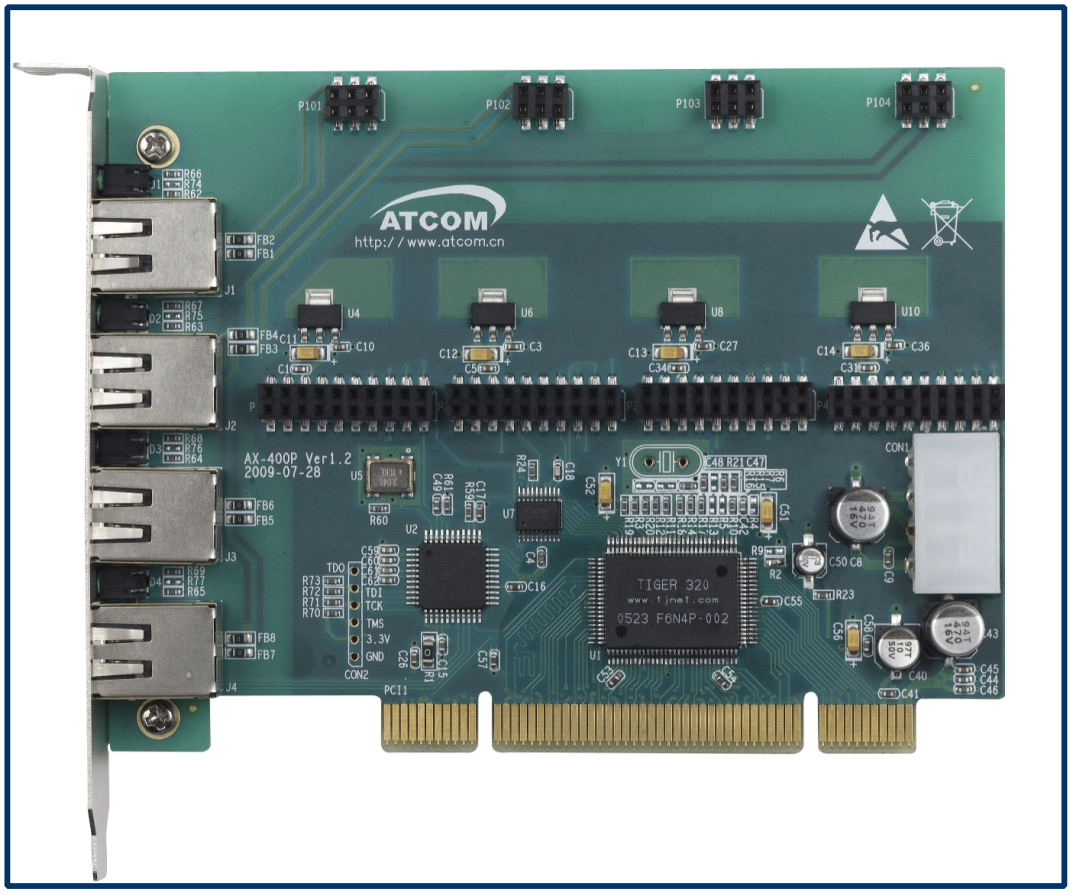

ATCOM® Analog Card AX-400P

Product Guide

Version: 1.0

The Installation of AX-400P with AsteriskNow 1.5.0

Content

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.

Contact sales:

Address	A2F , Block 3 ,Huangguan Technology Park , #21 Tairan 9th Rd, Chegongmiao , Futian District , Shenzhen China , 518040
Tel	+(86)755-23487618
Fax	+(86)755-23485319
E-mail	sales@atcomemail.com

Contact Technical Support:

Tel	+(86)755-23481119
E-mail	Support@atcomemail.com

Website address: http://www.atcom.cn/

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

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

Chapter 1 the Introduction of AX-400P

Overview of the AX-400P

AX-400P Asterisk card is the TDM400P compatible PCI card that supports up to four FXO and FXS ports. Using AX-400P analog card, open source Asterisk PBX and stand alone PC, users can create their SOHO telephony solution includes all the sophisticated features of traditional PBX, and extend features such as voicemail in IP PBX. User can use AX-400P analog card with standard zaptel driver and Asterisk source code without modify any code. The FXO and FXS modules are interchangeable to suit various requirements.

Features

Analog card for Asterisk PBX
Support Asterisk PBX and zaptel driver
Support up to four fxo/fxs analog port
Suitable for SOHO PBX / VoiceMail / IVR.
Caller ID and Call waiting Caller ID
Conference

Configuration

Motherboard: AX-400P
Single port FXS module: AX-110S
Single port FXO module: AX-110X

Hardware requirement

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

PCI card dimension:

102mm (height) × 134mm (Length)

Chapter 2 Hardware Introduction

Hardware Configuration

Motherboard: AX-400P

Modules:AX-110X,AX-110S

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

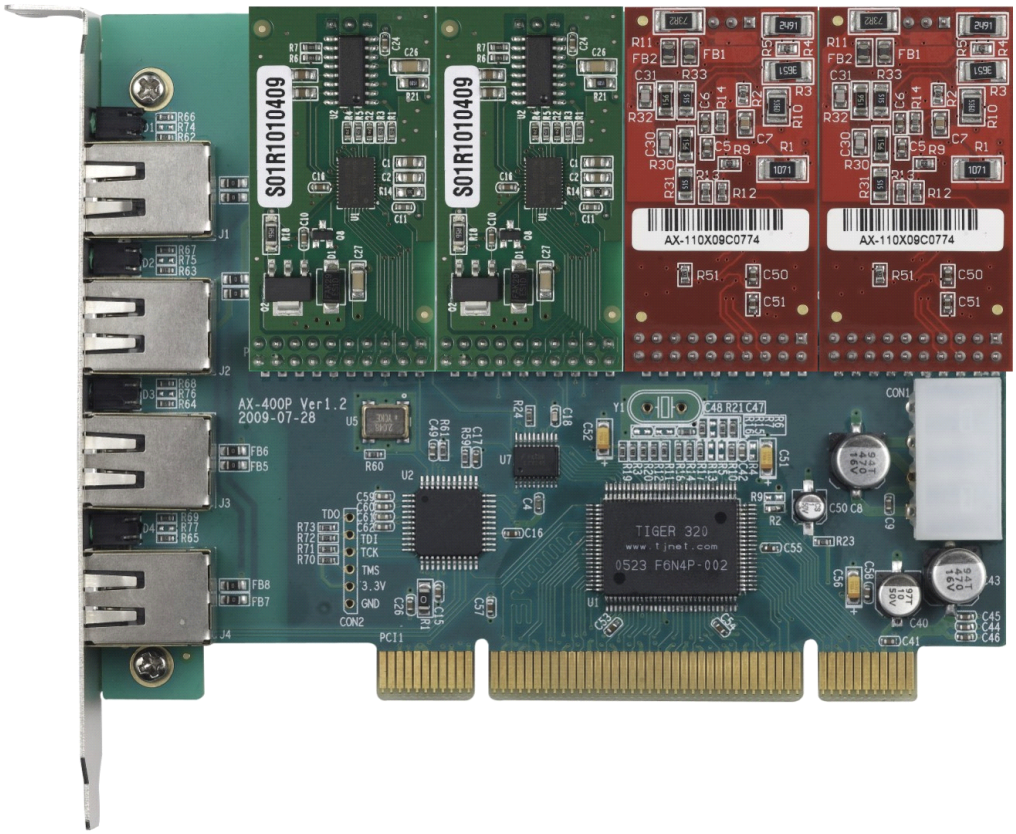

Figure 1:AX-400P with 2 AX-110S and 2 AX-110X

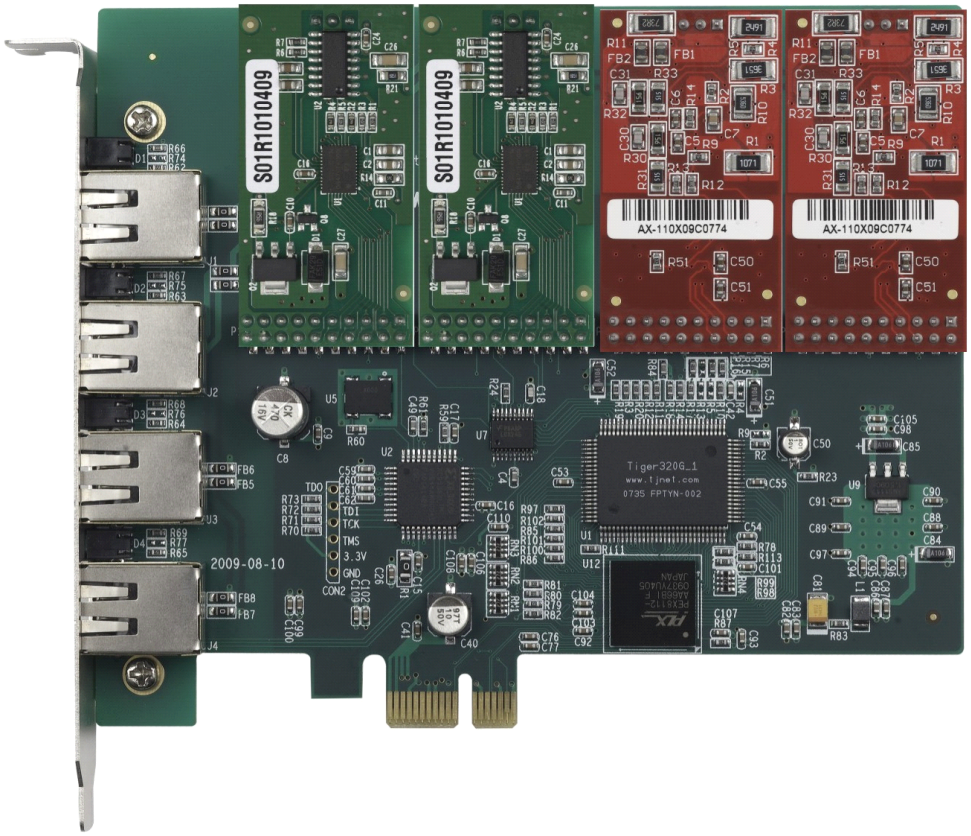

Figure 2:AXE-400P with 2 AX-110S and 2 AX-110X

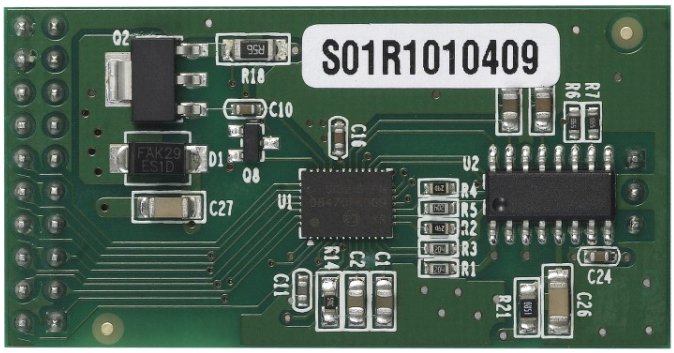

Figure 3: AX-110X Single FXS Module

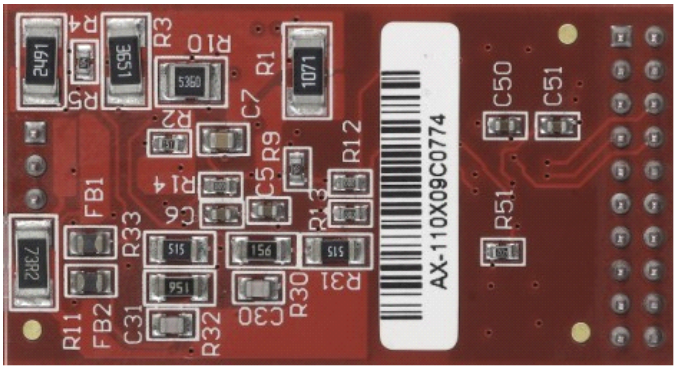

Figure 4: AX-110S Single FXO Module

Chapter 3 Software Installation

Test Environment:

AsteriskNow 1.5.0
AX-400P
4 AX-110X

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

   ==========

   05:02.0 Communication controller: Tiger Jet Network Inc. Tiger3XX Modem/ISDN interface

   ==========

   An "Tiger3XX Modem/ISDN interface" will be found, if you can not see it, 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.

Chapter 4 Software Configuration

1. 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.

2. To check whether it has finished the configuration, please open the system.conf file:
   [root@localhost ~]# vi /etc/dahdi/system.conf
   You will see:

```
================================================================
# Autogenerated by /usr/sbin/dahdi_genconf on Wed May 12 02:08:55 2010
# If you edit this file and execute /usr/sbin/dahdi_genconf again,
# your manual changes will be LOST.
# Dahdi Configuration File
#
# This file is parsed by the Dahdi Configurator, dahdi_cfg
#
# Span 1: WCTDM/4 "Wildcard TDM400P REV I Board 5" (MASTER)
fxsks=1
echocanceller=mg2,1
fxsks=2
echocanceller=mg2,2
fxsks=3
echocanceller=mg2,3
fxsks=4
echocanceller=mg2,4

# Global data

loadzone            = us
defaultzone         = us

================================================================
```

3. To creat the chan_dahdi.conf file then configure it:
   [root@localhost ~]# cd /etc/asterisk
   [root@localhost asterisk]# cp chan_dahdi.conf.template chan_dahdi.conf
   [root@localhost asterisk]# vi chan_dahdi.conf

You will see:

```
==========================================================================
;# Flash Operator Panel will parse this file for dahdi trunk buttons
;# AMPLABEL will be used for the display labels on the buttons

;# %c Dahdi Channel number
;# %n Line number
;# %N Line number, but restart counter
;# Example:
;# ;AMPLABEL:Channel %c - Button %n

;# For Dahdi/* buttons use the following
;# (where x=number of buttons to dislpay)
;# ;AMPWILDCARDLABEL(x):MyLabel


[channels]
language=en

; include dahdi extensions defined in FreePBX
#include chan_dahdi_additional.conf

; XTDM20B Port #1,2 plugged into PSTN
;AMPLABEL:Channel %c - Button %n
context=from-pstn
signalling=fxs_ks
faxdetect=incoming
usecallerid=yes
echocancel=yes
echocancelwhenbridged=no
echotraining=800
group=0
channel=1-2
==========================================================================
```

Please change from "channel=1-2" to "channel=1-4"

4. [root@localhost asterisk]# amportal restart

5. [root@localhost asterisk]# dahdi_cfg -vvvvvvvvvvv
   You will see:

```
==========================================================================
DAHDI Tools Version - 2.1.0.2
```

DAHDI Version: 2.1.0.4
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 03: FXS Kewlstart (Default) (Echo Canceler: mg2) (Slaves: 03)
Channel 04: FXS Kewlstart (Default) (Echo Canceler: mg2) (Slaves: 04)

4 channels to configure.

Setting echocan for channel 1 to mg2
Setting echocan for channel 2 to mg2
Setting echocan for channel 3 to mg2
Setting echocan for channel 4 to mg2
==========

6. [root@localhost asterisk]# asterisk -vvvvvvvvvvgrc

localhost*CLI> dahdi show channels
You will see:
==========

Chan	Extension	Context	Language	MOH Interpret
pseudo		default		default
1		from-pstn	en	default
2		from-pstn	en	default
3		from-pstn	en	default
4		from-pstn	en	default

==========

Chapter 5 Reference

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