# Appendix for Linux

This appendix gives information on how to get the CB31U working on TurboLinux 4.5.

You need to follow the steps below to use the CB31U on TurboLinux 4.5. But please note that your Linux needs development module to use the CB31U. For more information on how to set up development module,ask the distributor of your Linux.

Download the file
 Extract the file
 Make driver module
 Install the driver module
 Verify the installation

The version of [Kernel] and [PCMCIA-CS] of TurboLinux 4.5 is as follows.

Kernel version 2.2.13 PCMCIA-CS version 3.0.14

You have to log in as a **root user** to follow the steps above.

### 1.Download the file

Download the Linux driver for the CB31U at our web site(<u>www.rexpccard.co.jp/english</u>). You will get the file named **cb31\_cb.tar.gz**. But please note this driver is version.

#### 2.Extract the file

Extract the cb31\_cb.tar.gz ,following the procedure below.

# gunzip cb31\_cb.tar
# tar xvf cb31\_cb.tar

You will get the two files below after extracting.

**README-E.cb31**(Setup guide)**cb31\_cb.c**(Linux driver source for the CB31U)

## 3.Make driver module

(1) Copy the driver source file (**cb31\_cb.c**)

Copy the driver source file (**cb31\_cb.c**) to the directory which includes PCMCIA Client Driver source(The directory usually means pcmcia clients directory). If there is the extracted driver source file (**cb31\_cb.c**) in the directory /root/cb31, type the command as written below.

# cd /usr/src/linux-2.2.13/pcmcia-cs-3.0.14/clients
# cp /root/cb31/cb31\_cb.c .

(2) Edit Makefile

Add the three lines below to Makefile in the clients directory to compile cb31\_cb.

```
cb31_cb.o: cb31_cb.c
$(CC) -MD -c $(FLAGS) $(CPPFLAGS) $< -o $@
@mkdir -p . depfiles ; mv cb31_cb.d .depfiles
```

### (3) Execute Makefile

Compile cb31\_cb with make command.

# make cb31\_cb.o

(Caution)

If you come across the following error message,

Makefile:8: ../config.mk:No such file or directory make: \*\*\* No rule to make target '.../config.mk'. Stop.

Move up one directory and execute [make config]. You will get config.mk.

Move back to the clients directory and execute make command.

# cd .. # make config # cd clients

## 4.Install the driver module

(1) Copy the driver module file (**cb31\_cb.o**)

Copy the driver module file (**cb31\_cb.o**) to the directory which includes module related to PCMCIA.

# cp cb31\_cb.o /lib/modules/2.2.13-17/pcmcia/.

(2) Edit PCMCIA database (/etc/pcmcia/config)

Add the five lines below to load module so that the CB31U will be recognized.

device "cb31\_cb" class "scsi" module "cb\_enabler", "cb31\_cb" card "RATOC CardBus UltraSCSI CB31" manfid 0xc015, 0x0100 bind ""cb31\_cb"

(3) Reboot your system

You have to reboot your system to take effect.

# reboot

You have now completed the installation.

### 5. Verify the installation

When you insert the CB31U while pcmcia module is running, you will hear a recognition sound and see the following message.

scsi0: AdvanSys SCSI 3.2M : PCI Ultra 16 CDB: IO E400/F,IRQ10 scsi : 1 host.

If PCMCIA database (/etc/pcmcia/config) is wrong or the CB31U is not recognized, you will hear a rejecting sound. In such a case, check the message which will appear in /var/log/messages.

## **Other Linux**

We have done the compatibility test and the CB31U works fine on the following Linux. RedHat 6.1 Kondara 1.0

omoikane GNU/Linux 1.0 (1)You have to add "I\$(LINK)" to Makefile as follows.

```
cb31_cb.o: cb31_cb.c
$(CC) -MD -c $(FLAGS) $(CPPFLAGS) <u>I$(LINK)</u> $< -o $@
@mkdir -p . depfiles ; mv cb31_cb.d .depfiles
```

Kondara MNU/Linux 1.1 You can not load the driver for the CB31U,so you can not use Kondara MNU/Linux 1.1.

As for other Linux information, please check our web site(<u>www.rexpccard.co.jp/english</u>).

### **Tech-Support**

We tech-support only how to install the driver.

We don't tech-support how to use your SCSI devices on Linux.

We haven't done compatibility test with many kinds of PCs, so we don't tech-support questions about what kind of PC running Linux works fine with the CB31U.

If you have a question about installing, please feel free to contact a Tech support at the following.

(Open Monday – Friday,9:30A.M. to 5:00P.M. (PST)) RATOC Systems International,Inc. Tech support

Address:1933 O'Toole Avenue Suite A109 SanJose, CA 95131 U.S.A. Phone :(408)955-9400 Fax :(408)955-9402 E-mail :int-support@rexpccard.co.jp Web : <u>www.rexpccard.co.jp/english</u>.