

## Īiääiŭ JET TechFaith EVDO 3G è BLESS UC165 á Linux

Đaçääë : Ñèñòáìà. Ääìèíèñòðèðíáàíèá

Īi óáèèèîáâĪ SwitNJ [16/03/2011]

Ýòà áääáéñèíà èçááñòíà òàéæá èàè Flying\_Fish:

[http://www.techfaithwireless.com/english/products/products\\_WirelessCard\\_CDMA1X\\_4.htm](http://www.techfaithwireless.com/english/products/products_WirelessCard_CDMA1X_4.htm)

Èòàè... òáñòèðíáàèĪñŭ ýòĪ áñá íà opensuse 11.3, è òĪòŷ ùáñ óæá áŭøèà 11.4, äóìàð áñá äĪèæĪĪ ðááĪòàòŭ àíàèĪãè-ĪĪ

1) Áñòàáèŷáì áääáéñ á USB. Äàèää áñá äáéñòàèŷ Īò ðòòà

```
linux:/home/user # lsusb
```

```
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
```

```
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
```

```
Bus 003 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
```

```
Bus 003 Device 023: ID 05c6:1000 Qualcomm, Inc.
```

```
Bus 004 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
```

```
Bus 005 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
```

Ó íáñ áñòŭ áää ñĪĪñíáà Īáðáèèð-èòŭ áääáéñ á ðáæèĪ Īíááìà èç ðáæèìà ýíóèŷöèè èĪĪíàèò-ĪðèáĪáà (òàè íàçŭáááĪŭé ZeroCd)

2.a) USB\_MODESWITCH:

óñòáíáàèèèääàĪ usb\_modeswitch è usb\_modeswitch-data

Äçŷòŭ èò ĪæĪĪ óòò: (áñá ññŭèèè - ññŭèèè íà ðáĪĪçèòàðèè)

[http://download.opensuse.org/repositories/hardware/openSUSE\\_11.3/](http://download.opensuse.org/repositories/hardware/openSUSE_11.3/)

```
ñíçáàáĪ òàèèèè /etc/usb_modeswitch.d/05c6:1000:uMa=Qualcomm
```

á íáĪ äĪèñŭáááĪ

```
DefaultVendor= 0x05c6
```

```
DefaultProduct= 0x1000
```

```
TargetVendor= 0x1d09
```

```
TargetProduct= 0x4316
```

```
#For BLESS UC165
```

```
#TargetProduct= 0x4306
```

```
MessageEndpoint= 0x00000008
```

```
MessageContent= "5553424328932a860000000000000061b0000000200000000 000000000000"
```

çàòàì ìðíáóàì ìãðããîèéíóòü äãããéñ â ÞÑÁ ìðð

b) ñîçãããî òàéééé /lib/udev/rules.d/99-techfaith-jet.rules

â íàì ìèøàì

```
ACTION=="add", ATTRS{idVendor}=="05c6", ATTRS{idProduct}=="1000",  
RUN+="/usr/local/sbin/techfaith_driver.sh"
```

then make a file /usr/local/sbin/techfaith\_driver.sh

```
DEV=/dev/disk/by-id  
dfile=`ls $DEV | grep usb-Qualcomm`
```

```
for i in $dfile  
do  
eject $DEV/$i  
done
```

```
modprobe usbserial vendor=0x1D09 product=0x4316
```

```
# äëý ìãããà BLESS UC165 çàéìíáíòèòü ñòðíéó áùøá è ðãñéìíáíòèòü ýóó  
#modprobe usbserial vendor=0x1D09 product=0x4306  
exit 0;
```

ñîððàíýàì è äããããì äãì èñîéíýàìùì:  
chmod +x /usr/local/sbin/techfaith\_driver.sh

ìãðããñòããéýàì äãããéñ â ÞÑÁ ìðð  
Ýòìò ñîñííá ó ìáý ìèãòèé ìã ìãáíóñã 11.1

PS: Ìñéã àòíðíãì øããã àîçìæíí ìðèéããòñý ìãðããðóçèòü èíí.  
Óãù, èãé èèíóéñ ìã èðóó â ìèáíã ðãáíòü ìã æéãòà, ìí èííããà ìóæíí ìãðããðóçèòü

Ìãðããðóçèè?  
ñîòðèè áùáíã èííáíü lsub :

```
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub  
Bus 002 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub  
Bus 003 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub  
Bus 003 Device 024: ID 1d09:4316 TechFaith Wireless Technology Limited Bus 004 Device 001: ID  
1d6b:0001 Linux Foundation 1.1 root hub  
Bus 005 Device 001: ID 1d6b:0001 Linux Foundation 1.1 root hub
```

3) Äíãããéýàì â òàéééé /etc/modprobe.conf  
éèé â /etc/modprobe.d/99-local.conf (ñîòðý èãéàý äãðñéý àèñòðèáóòèãã)



MIN 1092480440  
\*\*\*\*\*

AT+MDN?

+MDN: ""  
OK

AT+ESN

ERROR

AT+MEID

+MEID: 0

OK

AT+GMR

+GMR: Q6085BR00.00.82 1 [Nov 12 2009 18:34:04]  
OK

\*\*\*\*\*

Software Version  
\*\*\*\*\*

at+GMI  
PeopleNet

OK

\*\*\*\*\*

Modem Identifier  
(or provider name, who locked modem)  
\*\*\*\*\*

at+GMM  
Jet

OK

\*\*\*\*\*

Modem Model  
\*\*\*\*\*

AT+EMODE=11

+EMODE: 11,2126

OK

\*\*\*\*\*

PRL Version = 2126

\*\*\*\*\*

AT+RTRE?

+RTRE: 2,0

\*\*\*\*\*

Query the current RTRE value

+RTRE:,

OK

:

0 RUIM\_ONLY

1 NV\_ONLY

2 RUIM OR DROP

:

0 RUIM version

1 No RUIM version

\*\*\*\*\*

AT+RLOCK?

+RLOCK: NOLOCK, RUIM is unlocked.

\*\*\*\*\*

UIM State +RLOCK?

\*\*\*\*\*

AT+RLOCK=0

+RLOCK: 0,PASS,0x9000,CHV1(D),INIT(I,I,I,I),CNT(3,A,3,A)

\*\*\*\*\*

Read UIM Particular Status +RLOCK

+RLOCK:

0,PASS,0x9000,CHV1(D),INI

(3,A,3,A)

OK

Note: 1.PIN disable \*\*CHV1(D)\*\*

2.UIM card is inserted

\*\*\*\*\*

AT+SPMS=UIM

OK

\*\*\*\*\*

Preferred Message Storage +SPMS  
AT+SPMS=UIM  
Notes: Select "UIM" message storage  
Must insert UIM card

OK

Note : message storage in UIM

\*\*\*\*\*

AT+SPMS?

+SPMS: "UIM" (Max:30, Hold:1)

OK

\*\*\*\*\*

Preferred Message Storage +SPMS  
Note : return the storag  
selected, and the total  
already hold number

\*\*\*\*\*

AT+SPMS=Flash

OK

++SPMS: "FLASH" (Max:255, Hold:0)

AT+CMGL

+CMGL:

OK

AT+SPMS?

+SPMS: "FLASH" (Max:255, Hold:0)

OK

AT+SPMS=UIM

OK

# Return to RUIM card for reading sms

AT+CMGL

+CMGL: 0

OK

\*\*\*\*\*

List ID with Message +CMGL

+CMGL: 0,1

OK

Note : there are messages in the index

0 and 1

\*\*\*\*\*

AT+CMGR=0,1

+CMGR: 0, 01A0,920,,2011/01/19

09:26:05,4098,000101,0,3D3D494E5445524E45543D3D204C6F67696E3A38303932323837353439

354070656F706C652E6E65742E75612050617373776F72643A353734323239

OK

AT+CMGR=1,1

+CMGR: 1, 01A0,920,,2011/01/20

15:26:02,4098,000101,0,3D3D494E5445524E45543D3D204C6F67696E3A38303932323837353439

354070656F706C652E6E65742E75612050617373776F72643A373031333731

OK

\*\*\*\*\*

Read Message

\*\*\*\*\*

AT+CVM

+CVM:

OK

\*\*\*\*\*

Not documented

\*\*\*\*\*

AT+PB?

+PB: 500,0,500,1

OK

\*\*\*\*\*

PhoneBook from UIM (really)

not documented

\*\*\*\*\*

AT+RUIMPB?

ERROR

\*\*\*\*\*

PhoneBook (from FLASH, I think)  
not documented, and do not work on JET Techfaith  
\*\*\*\*\*

AT+CSQ?  
+CSQ: 26, 82

OK

\*\*\*\*\*

Signal Quality +CSQ  
This command is used to ascertain the received Signal Quality Measure  
() and the Frame Error Rate ().  
+CSQ: ,  
OK

99 - no Signal  
\*\*\*\*\*

AT+HDCSQ?  
+HDCSQ: 31, 74

OK

\*\*\*\*\*

Signal Indicator Query Function Command in the HDR Mode  
This command is used to ascertain the received Signal Quality Measure  
() and the Frame Error Rate ().  
+CSQ: ,  
OK  
\*\*\*\*\*

at+CREG=8199  
OK

\*\*\*\*\*

Signal State Report +CREG  
This command is used  
report of current state

Command syntax : AT+CREG=  
Response syntax : +CREG :

0: Disable network registration(auto signal quality& CDMA state report) unsolicited result  
code



1: Enable auto signal quality report code result code (it will return the response of AT+CSQ)  
2: Enable CDMA state report code result code (it will return the response of AT+CAD)  
3 Enable network registration(auto signal quality&CDMA state report) unsolicited result code  
8199 --- undocumented, but always making by modem manager  
\*\*\*\*\*

AT+MODEPREF?  
+MODEPREF: 4

OK

\*\*\*\*\*

What network mode is turned

\*\*\*\*\*

AT+MODEPREF=10

++SYSMODE: 2

OK

\*\*\*\*\*

Set ONLY EVDO Mode of network

\*\*\*\*\*

AT+MODEPREF=9

++SYSMODE: 2

OK

\*\*\*\*\*

Set 1x Mode of network

\*\*\*\*\*

AT+MODEPREF=4

++SYSMODE: 4

OK

\*\*\*\*\*

Set HYBRID Mode of network

\*\*\*\*\*

AT+CMGOPT?

+CMGOPT: 0, 1, 0, 0, 4

OK

\*\*\*\*\*

Display SMS options  
Undocumented  
\*\*\*\*\*

AT+CMGOPT=0,1,0,0,4;+CMGS=255,920,,010103,007400650078007400200054004500580054002  
004420435043A04410442002004220415041A04210422

OK

\*\*\*\*\*

Send SMS

Was sended in unicode:  
text TEXT òâêñò ÒĂÊÑÒ  
\*\*\*\*\*

AT+CMGTAG=1,1

OK

\*\*\*\*\*

tag sms as read?  
do not work  
\*\*\*\*\*

AT+CMGD=0

OK

\*\*\*\*\*

Delete SMS at index 0

Syntax :  
Command syntax : AT+CMGD= [,]  
Command Possible responses  
+CMTI:..SM.,3  
Note : New message received  
AT+CMGD=3  
Note : Delete it  
OK  
Note : Message deleted  
AT+CMGD=52  
Note : Delete it  
+CMS ERROR: 321  
Note : the index is wrong.  
AT+CMGD=1,0 OK  
Note : The message from the preferred  
message storage at the location 1 is

deleted  
AT+CMGD=1,1 OK  
Note : All READ messages from the preferred message storage are deleted  
AT+CMGD=1,2 OK  
Note : All READ messages and SENT mobile originated messages are deleted  
AT+CMGD=1,3 OK  
Note : All READ, SENT and UNSENT messages are deleted  
AT+CMGD=1,4 OK  
Note : All messages are deleted  
\*\*\*\*\*

AT+PB=5  
+PB: 5,1  
OK

AT+WPCS=TEXT;+PB=2,1,0636165126,"Swit"  
OK  
\*\*\*\*\*  
Write to UIM PhoneBook in text mode  
phone num: 0636165126  
name: Swit  
\*\*\*\*\*

AT+PB=5  
+PB: 5,2  
OK

AT+WPCS=HEX;+PB=2,2,0667152055,"0412043504420430043B044C"  
OK  
\*\*\*\*\*  
Write to UIM PhoneBook in HEX mode (for unicode text)  
phone num: 0667152055  
name: Ååòàëü  
\*\*\*\*\*

AT+WPCS=TEXT;+PB=2,1,0030667152055,"Swit!"  
OK

Edit UIM PB is the same as write to it

AT+PB=5  
+PB: 5,2  
OK

\*\*\*\*\*  
Get UIM PhoneBook Status, %1 - ??, %2 - Next Free cell  
\*\*\*\*\*

AT+PB?  
+PB: 500,1,499,2

OK

\*\*\*\*\*  
500 - max cells

\*\*\*\*\*

++CMT: 2,920,,2011/01/20  
15:42:58,0001010A,3D3D494E5445524E45543D3D204C6F67696E3A38303932323837353439354  
070656F706C652E6E65742E75612050617373776F72643A363937303730

\*\*\*\*\*  
ANSWER FROM MODEM - SMS ARRIVED!!! detected on port /dev/ttyUSB2  
\*\*\*\*\*

AT+CMGTAG=2,1

\*\*\*\*\*  
tag sms was readed??  
\*\*\*\*\*

Ðàáíòà ñ àäðáñííé êíèãíé

AT+PB=5  
+PB: 5,2  
OK

AT+PB=2,1,920,"passw"  
OK

at+pb?  
+PB: 500,1,499,2  
OK

AT+PB=5

+PB: 5,2  
OK

AT+PB=2,2,921,"ppp"  
OK

AT+PB=5  
+PB: 5,3  
OK

AT+PB?  
+PB: 500,2,498,3  
OK

AT+PB=8

+PB: 8,1,920,passw  
+PB: 8,2,921,ppp

OK

\*\*\*\*\*

AT+PB=8

Display PhoneBook Content

\*\*\*\*\*

Íó è êî ãñáíó ïðí÷áíó ÿ íàèðàìàè ìàèáíüéóp ïðíððàìéó íà ìèòííá

Íía êííñíëüíáÿ, ìíæáò ÷èòàòü ñíñ-êè è óääëÿòü èõ.

Ïðíððà àáòíìàðè÷áñèè íàðíàèò óñòðíéñòáì è ïðòò íà êíòíðíì ïíí ñèàèò.

Áñèè èòí-òí ìíæáò àáàìòèððíààòü ñáé ááááéñ é èçááñòíüì òáèáòíííüì ìáíááæáðàì

ïíà èèíóèñ (ñíèñíê áúøá) - áóáó ðáá ïòáñòèððíààòü èèè ïðááíñòááèð ááááéñ á

ïíëüçíáááéá ïí èíòáðíáòò (óáàèáííüì áññòóííì).

Íáðíííá ñíàñèáí SwitNJ çà ñòàòüð.