

Īiääiû JET TechFaith EVDO 3G è BLESS UC165 á Linux

Đaçääë : Ñèñòáìà. Ääìèíèñòðèðíáàíèá

Īi óáèèèîáâĪ SwitNJ [16/03/2011]

Ýòà áääáèñèíà èçááñòíà òàéæá èàè Flying_Fish:

http://www.techfaithwireless.com/english/products/products_WirelessCard_CDMA1X_4.htm

Èòàè... òáñòèðíáàèĪñü ýòí áñá íà opensuse 11.3, è õìòÿ ùáñ óæá áûøèà 11.4, äóìàð áñá äĪèæĪĪ ðááíòàòü àíàèĪãè-ĪĪ

1) Áñòàáèÿáì áääáèñ á USB. Äàèää áñá äáèñòàèÿ Īò ðóòà

```
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 áñòü áää ĪĪĪñíáà Īáðáèèþ-èòü áääáèñ á ðáæèì Īiááìà èç ðáæèìà ýíóèÿòèè èĪĪiàèò-ĪðèáĪáà (òàè íàçúáááĪüé ZeroCd)

2.a) USB_MODESWITCH:

óñòáíáàèèèääáì usb_modeswitch è usb_modeswitch-data

Äçÿòü èõ ĪiæĪĪ óóò: (áñá Īñüèèè - Īñüèèè íà ðáĪĪçèòàðèè)

http://download.opensuse.org/repositories/hardware/openSUSE_11.3/

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

á íáì äĪèñüáááì

```
DefaultVendor= 0x05c6
```

```
DefaultProduct= 0x1000
```

```
TargetVendor= 0x1d09
```

```
TargetProduct= 0x4316
```

```
#For BLESS UC165
```

```
#TargetProduct= 0x4306
```

```
MessageEndpoint= 0x00000008
```

```
MessageContent= "5553424328932a86000000000000061b0000002000000000 000000000000"
```

çàòàì ìðíáóàì ìãðããîèéíóòü äãããéñ â ÞÑÁ ìððò

b) ñîçãããì 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 ðàñéìíáíòèòü ýòó  
#modprobe usbserial vendor=0x1D09 product=0x4306  
exit 0;
```

ñîððàíýàì è äããããì äãì èñîíéíýàìùì:
chmod +x /usr/local/sbin/techfaith_driver.sh

ìãðããñòããéýàì äãããéñ â ÞÑÁ ìððò
Ýòòò ñîíííá ó ìáíý ììèàðèè ìà ìãáíóñã 11.1

PS: Ìñéã àòíðíãì øããã àíçìíæíì ìðèéããòñý ìãðããðóçèòü èíì.
Óãù, èàé èèíóéñ ìá èðóó â ìèáíá ðãáíòù ìà æèãòà, ìì èííããà íóæíì ìãðããðóæàòü

Ìãðããðóçèèè?
ñîòòèè áùáíã èíìáíãù 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
èèè â /etc/modprobe.d/99-local.conf (ñîòòðý èàéàý äãðñéý àèñòðèáóòèèè)

```
#
# JET EVDO 3G Modem
#
```

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

```
è ñíõðáíýâì
```

```
4) Åæüøå íóæí ðàñøåååèèòù ñèñòáíó, "íðíáòòù ïðòù ïíááíà", òàè ñèàçàòù )
```

```
rmmod usbserial
modprobe usbserial
```

```
PS: áñèè èðííá ýòíáí ááááèñà ó ààñ áñòù áùá ÷òí-òí, íáíðèíáð ýíóèýòíðù ðñá-èí ïðòíá
è òíó ïíáíáíá - ïðèèð÷èòà èò è íáðáçàáðóçèòá èííüðòáð, èíá÷á íá ïíó÷èòñý áùáðóçèòù ïíáóèè
ýäðà!
```

```
ls -l /dev/ttyUSB*
```

```
crw-rw---- 1 root dialout 188, 0 ßíá 27 09:48 /dev/ttyUSB0
crw-rw---- 1 root dialout 188, 1 ßíá 27 09:48 /dev/ttyUSB1
crw-rw---- 1 root dialout 188, 2 ßíá 27 09:48 /dev/ttyUSB2
```

```
Åñá, ïíááí ïðáááèèèñý!
```

```
Èòàè.. èñííèüçíáàòù ïíááí äèý áíñòóíá á èíóáðíáð - ïðíáèáí íáò! - íá ýòíò ñ÷áò á èíóáðíáòá ìàññá
ñòàòáè è ñíííáíá.
Íí ý èñííèüçòð ýòíò ïíááí íá ðááíòá äèý ïíó÷èòñý ñíñ-íè. È òòò ó íáíý ïðíáèáíèá ïíýàèèáñù.
Åæè á òí, ÷òí ýòíò ïíááí íá ïíáááðæèááò ìè íáíà ñíðòèíá ïí òèíó Gnokii, wader, umtsmon..
"Áááá!..." (ñ) Áúèíá, "Èíóáðíú"
Íó ÷òí ááèàòù? ïðèèèññù áòùèàòù óñòðíèñòáí ïíá áèíáíè è ìáòíáí ðáááðñ-èíæèèèèíá è ïáðáòáòá
ïðòíá ñíðòáòù
èàèèá èííáíáù øèáò ááí ðíáíáý áèíáíáý òðèèèèà - òàèáòíííúé ìáíááæáð, èíòíðúé áðèò íá "ñáèñòíè".
```

```
Åíò ÷òí óáàèíñù ïíó÷èòñý:
```

```
AT
OK
```

```
ATE0V1
OK
```

```
AT+IMSI?
```

```
+IMSI:255211092480440
OK
```

```
*****
```

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 àäðãñííé 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-èè è óääëÿòü èõ.
Ïðíáà àáòíìàðè÷áñèè íàðíàèò óñòðíéñòáì è ïðòò íà êíòíðíì ïíí ñèáèò.
Áñèè èòí-òí ìíæáò àáàìòèððíáàòü ñáé ááááéñ é èçááñòíüì òáèááòííüì ìáíááæáðàì
ïíà èèíóèñ (ñíèñíê áúøá) - áóáó ðáá ïòáñòèððíáàòü èèè ïðááíñòááèð ááááéñ á
ïíëüçíáááéá ïí èíòáðíáòò (óääèáííüì áññòóííì).

Íáðíííá ñíàñèáí SwitNJ çà ñòàòüð.