SUPPORT FORUMS

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PBO Bootcode Update (TFTPD/LAN Free) Under $6 and Under 666 Seconds

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View Poll Results: Knowing how easy it is, are you going to attempt a bootcode update on your own ?

Sure.	▬▬▬▬▬	74	70.48%
Never.	▬	5	4.76%
Only as an unbricking attempt.	▬▬	26	24.76%

Voters: **105**. You may not vote on this poll

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☐ 04-16-2010, 07:43 AM   #**1**

aasoror ●   Join Date: Dec 2009
Moderator   Location: ON, Canada
                                        Posts: 3,609

⚠ **PBO Bootcode Update (TFTPD/LAN Free) Under $6 and Under 666 Seconds**

I. Materials (under $6):

- 4 dupont wires TPK pin header (get 20 for $2.5 here), or use a 4 pin CD/DVD audio cable.
- Nokia CA-42 USB Data cable (get one for $2.68 here)
- Wire stripper
- Electric tape

2288x1712 685K.jpg

II. Serial Cable Preparation (under 4 minutes):

- cut the CA-43 cable and strip the part of it.
- strip the wires inside the cable (depending on the specific cable manufacturer you might find different arrangement than the one below)
- The wires are color coded as the following:

Code:
```
BLACK --> GROUND
RED   --> VCC
WHITE --> TXD
GREEN --> RXD
```


2288x1712 459K.jpg

- strip the dupont wires
- twist together (use typical soldering knots or solder them if possible)
- cover with electric tape

2288x1712 705K.jpg

III. Hock up (under 2 minutes)

- Download and install the cable drivers from here (Nokia drivers wont work), get Win7 compatible drivers from here (thank you tskitishvili).
- Insert the cable and use the device manager to set the COM port parameters as follows **(115200,8,N,1,N)**

759x451 63K jpg

- open up the PBO (make sure back switch is turned off), connect the serial port pins to the matching wires as indicated earlier.

1462x969 301K jpg

IV. Bootcode update (under 5 minutes)

- Open MS Hyper Terminal (or get it from here or the get the one extracted from my XP pro machine from here)
- Create a new connection with the same setting as the serial cable COM port settings **(115200,8,N,1,N)**.
- connection should now be open (with a time counter at the status bar)
- holding the Esc key switch the PBO on
- You should now be connected to the **Realtek Rom Monitor**

865x537 86K jpg

- Type the following command at the prompt to load the bootcode file (press Enter when done)

Code:
```
load -b asc://tty0 0x80100000
```

- When you get the message to dump the file, transfer the bootcode bin file to the PBO using the **Ymodem-G protocol** (from the Transfer menu)

865x537 97K jpg

- Wait till the transfer is complete and window disappears, press OK at the message box that follows.
- Next execute the bootcode by typing the following command at the prompt (press Enter when done)

Code:
```
go 0x80100000
```

- Wait until code is executed and you are back the Realtek prompt.
- Turn off the PBO
- close Hyper Terminal (remember to save the created connection)
- unhock the serial cable from the PBO then from your PC
- close the PBO, hock back to your TV, check the bootcode version, you should see .18

Viola .. total cost under $6 .. total time under 666 seconds

Side notes:

You can similarly reload corrupted video / audio drivers without TFTPD:

Code:
```
load -b asc://tty0 0x81b00000
```

and transfer the **bluecore.audio** (extracted from the firmware image) using the **Ymodem-G protocol**
then

Code:
```
load -b asc://tty0 0x81d80000
```

and transfer the **video_firmware.bin** (extracted from the firmware image) using the **Ymodem-G protocol**.

Also if you need to clear a corrupted firmware image (**unbricking without bootcode update**)

Code:
```
erase -m
```

then proceed with the FAT32 USB firmware recovery procedure.

If you happened to get a 3 wire cable that you don't know the proper wire assignment to .. you can try this

Quote:

you can try a simple test that wont break anything (you can only do this because you got 3 wires so the cable is USB powered).

Twist the naked green and white wires together, connect to the cable, run the HT, setup the connection as described in the OP, once you get the connection to open .. type anything at the prompt, if the white/green are indeed the txd/rxd then you should see whatever you type echoed back to you.
If one of them is ground then you should see nothing, so try green/yellow then white/yellow.

Once you determine the ground (by elimination), proceed with the connection to the PBO, even if rxd/txd are inverted this wont harm the PBO, you wont be able to send anything to the box and you will just see the startup sequence on the HT screen (because you will not be able to interrupt it with the escape key), just switch those wires and you should be done.

Disclaimer:

Perform at your own risk, you might end up bricking your box and voiding your warranty.

Acknowledgments:

- **Mickez** for reminding me about the cheap phone cables
- **The Globule** and the **anonymous** guy from O!Play hack forum for getting me inside the Realtek Rom Monitor
- **Outatouch0** for motivating me to get this done this century
- **Google** .. for pretty much everything else 🙂

Resources:

- Use a Nokia Serial Cable on an ARM9 Linkstation
- Use a cheap phone sync cable with the serial port
- How to install Windows XP HyperTerminal client on Windows 7 or Vista for Free

Its OK to rate this thread 🙂

Various reports about the wire color codes of the CA-42:

Quote:

Originally Posted by **GreatSunJester** 🔗
BargainCell via Amazon, ... Green is ground, TXD is white and RXD is yellow.

Quote:

Originally Posted by **supergizboy** 🔗
Amazon, Red --> TX, Green --> RX, Black --> GND, White --> (not used)

Quote:

Originally Posted by **__B__** 🔗
Ark Pioneer Microelectronics Ltd., with 6 wires. White (GND), yellow (TX) and blue (RX). (Black, Red and Green UNUSED)

Quote:

Originally Posted by **kakureru** 🔗
My cable is CA-42, VCC+ - Red, RX - Blue, TX - white, GND - black

Quote:

Originally Posted by **GuyllFyre** 🔗
I bought a Chinese eBay CA-42 cable, Blue - GND, Green - TX, White - RX

Quote:

Originally Posted by **chop69** 🔗
my cable is an eBay CA-42. Blue --> Rx, Red --> Tx, Orange --> GND

Quote:

Originally Posted by **venn** 🔗
I've got a 3 wire CA-42 cable which is based on the Prolific PL-2303 chip. BLUE = GND, WHITE = Rx, YELLOW = Tx

Quote:

Originally Posted by **adamsky** 🔗
My DKU cable setup BLUE = GND, WHITE = Tx, YELLOW = Rx

Quote:

Originally Posted by **avman** 🔗
My CA-42 cable has:gnd = orange,tx = blue,rx = red

(Compatible Win7 driver)
_____
[*]Still new .. your shares gone for no reason 😴? Create a machine shortcut. **[*]**Trashing the G-adapter? upgrade cheaply to N. **[*]**Getting the hang of it? get organized .. add share shortcuts. **[*]**Getting sick of it 😞? it never hurts to rant here **[*]**Wishing for the time machine? give your PBO a makeover and keep your remote as well. **[*]**Bricked it while doing so 😵? unbrick it for $5**[*]**Not into cross flashing? keep it semi-official **[*]**Too lazy to read all that 😊? you asked for it.**[*]** Thank U PBO

Last edited by aasoror; 11-04-2010 at 11:23 PM.

🔲 Quote

� 04-16-2010, 07:57 AM   #**2**

wigout ◉   Join Date: Feb 2010
Moderator   Posts: 647

🖹
_____

Well done aasoror.
That's showing that pbo who's boss.
It'll boot up the bootcode you tell it to boot up or else.
(or else you'll get an o!play)
-wigout
_____
#####
Unofficial Patriot Box Office FAQ/Master List of Great Threads/Posts
Best Hack/Mod Threads/Posts
MiniModding Patriot Box Office Forum

#####

Quote

04-16-2010, 09:06 AM   #**3**

outatouch0
Senior Member

Join Date: Dec 2009
Posts: 521

👍

Thanks for the above - I think we all encourage and motivate each other.
Step IV is taking me a little bit more than 6 min lol - not so easy for neophytes to networking though I do enjoy the learning despite the occasional frustration.

Quote

04-16-2010, 09:55 AM   #**4**

aasoror 🟢
Moderator

Join Date: Dec 2009
Location: ON, Canada
Posts: 3,609

> Quote:
> Originally Posted by **wigout** 🔎
> *It'll boot up the bootcode you tell it to boot up or else.*
> *(or else you'll get an o!play)*
> *-wigout*

The way things are going now, it seems that it will be getting an O!Play firmware update whether or not it decided to cooperate on the bootcode update 🙂

> Quote:
> Originally Posted by **outatouch0** 🔎
> *Step IV is taking me a little bit more than 6 min lol - not so easy for neophytes to networking*

Thats exactly the reason step IV shouldn't take much time now, there is no more networking involved 🙂

Quote

04-16-2010, 01:57 PM   #**5**

Toolman
Junior Member

Join Date: Dec 2009
Posts: 12

Great post! thanks for the info. I ordered the parts and will give this a try.

Quote

04-16-2010, 02:25 PM   #**6**

watcher
Banned

Join Date: Mar 2010
Posts: 71

THANK YOU!!!!!!!!!!!!!!!
😁😁😁
you get all the stars on this one!
🙂

Quote

04-16-2010, 04:27 PM   #**7**

visionlogic
Member

Join Date: Dec 2009
Posts: 43

👍

Thanks aasoror! 🙂 Just ordered the supply of chinesium & will give it a shot.

Quote

04-16-2010, 04:48 PM   #**8**

snappy46
Senior Member

Join Date: Dec 2009
Location: Canada (ON)
Posts: 770

👍

> Quote:
> Originally Posted by **aasoror** 🔎
> *Outatouch0 for motivating me to get this done this century*

I hope that getting this done this century did not interfere with your high paying 24/7 job here on this forum. Maybe that's the reason I was able to help a few people here before you had time to jump in first? 😁

Well Done step by step tutorial.

Quote

04-17-2010, 01:50 AM   #**9**

The Globule
Senior Member

Join Date: Feb 2010
Location: Florida
Posts: 317

👍

I don't like this method... 😡

Just kidding! 😵

Great job on this post aasoror 😎

Quote

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jamaroney ⚫
Member

Join Date: Jan 2010
Posts: 82

Looks tempting!

But, remind me, please - what are the advantages of the newer bootcode? I seem to have no issues with my present bootcode - should I simply leave well enough alone?

Quote

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Tags

bootcode update, hyper terminal, no lan, no tftdb

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