

VU+ Duo

I bought a broken VU+ Duo, the only thing it did was a red led on the display.

The serial port and the ethernet port did not do anything, and if I plugged in a USB stick the led on it did not go on (no voltage on USB port).

All the power supply voltages were ok.

On several forums I found that C807 could be the problem, but C807 had already been replaced.

With an oscilloscope I checked the motherboard but there was no activity to find so I concluded that it was completely broken or the firmware or bootloader was corrupt or missing, and that the initialization of the machine was completely wrong.

So I went to search for a solution to program the bootloader back to the board.

USB and the serial method could not work because the board is completely "DEAD", so I went to search for a JTAG solution and found it here in this thread:

<http://linuxsat-support.com/vu-support/12696-need-info-vu-jtag-broadcom-tools.html>

The post from iso-mick (thanks !!):

BBS pinout

1 is 3v3

2 is BSC_SCL

3 is BSC_SDA

4 is GND

in the code it looks for

vendor 0x0A5C (broadcom), id = 0xB12C (Broadcom I2C)

or

%VID_04b4&PID_8613.DeviceDesc%=Broadcom, USB\VID_04b4&PID_8613

%VID_0a5c&PID_b12c.DeviceDesc%=CYUSB, USB\VID_0a5c&PID_b12c

It seems the device is just a

Cypress CY7C68013A EZ-USB FX2LP USB2.0 Development Development Board Module

Cypress CY7C68013A EZ-USB FX2LP USB2.0 Development Development Board Module | eBay

It's working (software detects the interface and the SCL SDA are toggling checked with a scope) but no reply from our target (not a Vu box), so BBS and the JTAG seem disabled on our target.

Mick

And the post from Arber (also Thanks !!):

VU+ JTag Broadcom Tools

How to install After extracting the compressed file that is installer in the follow order.

BBS

1. Install Framework 4
2. Install BroadCom Studio3
3. Install BCM97325 [Do not use setup install file] [VU+ SOLO]
4. Install BCM97335 [Do not use setup install file] [VU+ DUO]
5. Install BCM97413 [Do not use setup install file] [VU+ UNO/ULTIMO]
6. Bcm USB [Use USB Driver update]

How to run

1. Broadband Studio 3 runs
2. Select Menu => View => devices => BCM97325 [VU+ SOLO]
3. Select Menu => View => devices => BCM97335 [VU+ DUO]
4. Select Menu => View => devices => BCM97413 [VU+ UNO/ULTIMO]

3. After turning on the STB, you can see the message 'Connected'
4. Select Flash Explorer
5. Select the Type ' K9F1G08U0A '
6. Select refresh
7. Select the update file in Browser
8. Select start

Duo photo was big to upload

Once found the files shall post them

P.s. Who can give a hand to find these softwares to complete the case

Bcm97325.zip

Bcm97335.zip

Bcm97413.zip

cfe_Duo.zip

cfe_Solo.zip

cfe_Ultimo.zip

cfe_Uno.zip

how to use BBS - SOLO_UNO_DUO_ULTIMO.pdf

The first thing was where to download the software, this can be done at:

<http://www.sat-dreambox.com/f58/vu-jtag-broadcom-tools-8129/>

from this site you need to download the software:

Bcm97325.zip
Bcm97335.zip
Bcm97413.zip
cfe_Duo.zip
cfe_Solo.zip
cfe_Ultimo.zip
cfe_Uno.zip
how to use BBS - SOLO_UNO_DUO_ULTIMO.pdf

On ebay you need to order the Cypress CY7C68013A EZ-USB FX2LP USB2.0 board for about 12 euro.

It took 3 weeks before the cypress board arrived.

!!!!!! Watch out On the cypress site you can download tools to program this board but you absolutely must not install them because it will install a different driver for this board if you plug this board in!!!! So use ONLY the software from this list:

Bcm97325.zip
Bcm97335.zip
Bcm97413.zip
cfe_Duo.zip
cfe_Solo.zip
cfe_Ultimo.zip
cfe_Uno.zip

So here is what I did (for the VU+ DUO):

I used an old laptop with windows xp 32 bit.

1: unzipped downloaded files

2: installed Broadcom Studio 3

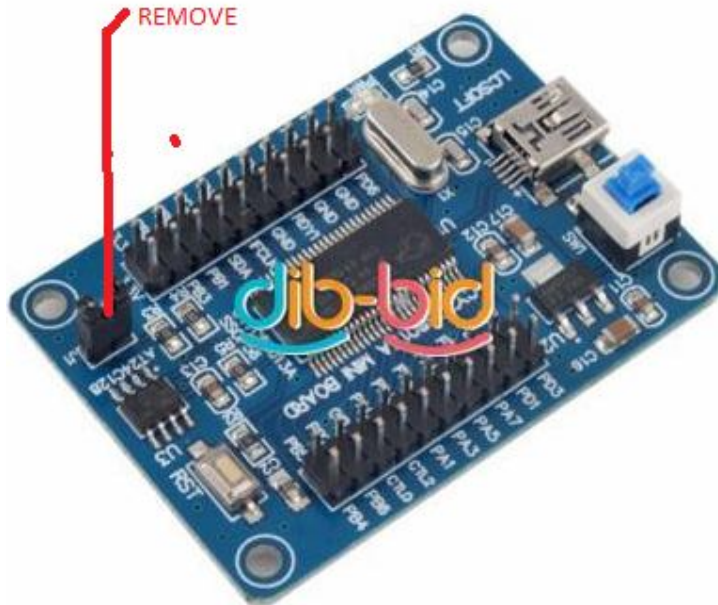
3: Installed Bcm97335.msi (do not use setup in the same directory) for a Duo

If you have a SOLO use Bcm97325.msi (do not use setup in the same directory)

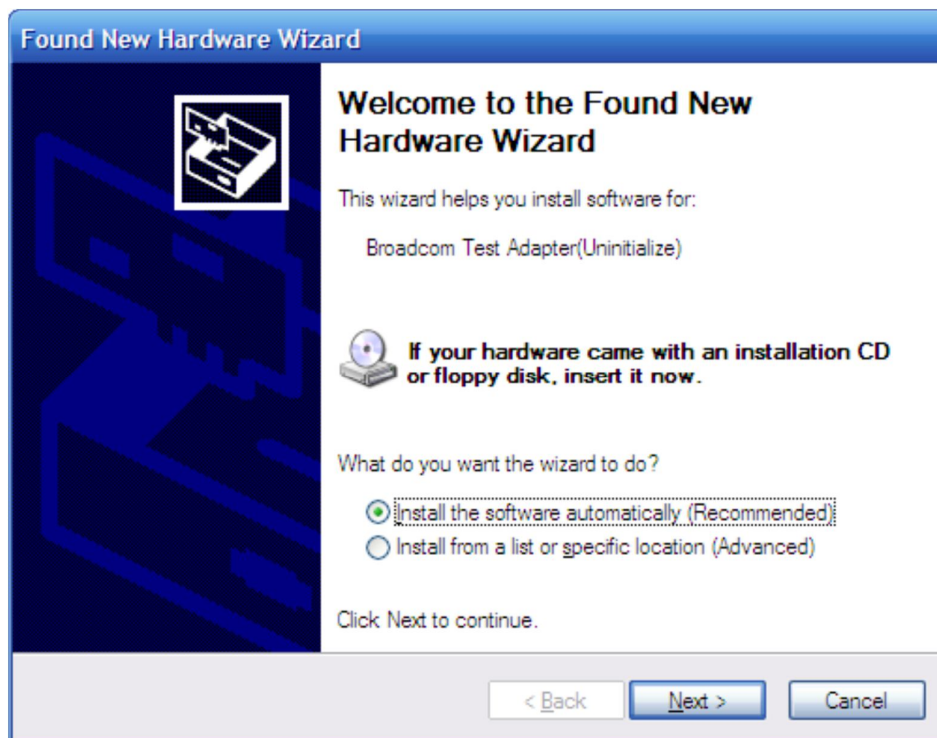
If you have a UNO or ULTIMO use Bcm97413.msi (do not use setup in the same directory)

4: Plug in the Cypress board on a USB port. Do not connect the vu+ to the cypress board yet.

"Watch out jumper on cypress board needs to be disconnected"



After plugging in you get the following:



Chose install automatically, the driver installs and after the wizard you have to reboot

After the reboot the above wizart appears again only it says:

This wizard helps you install software for: Broadcom Test Adapter

Follow the wizard using install automatically and after the wizard is done you are ready installing

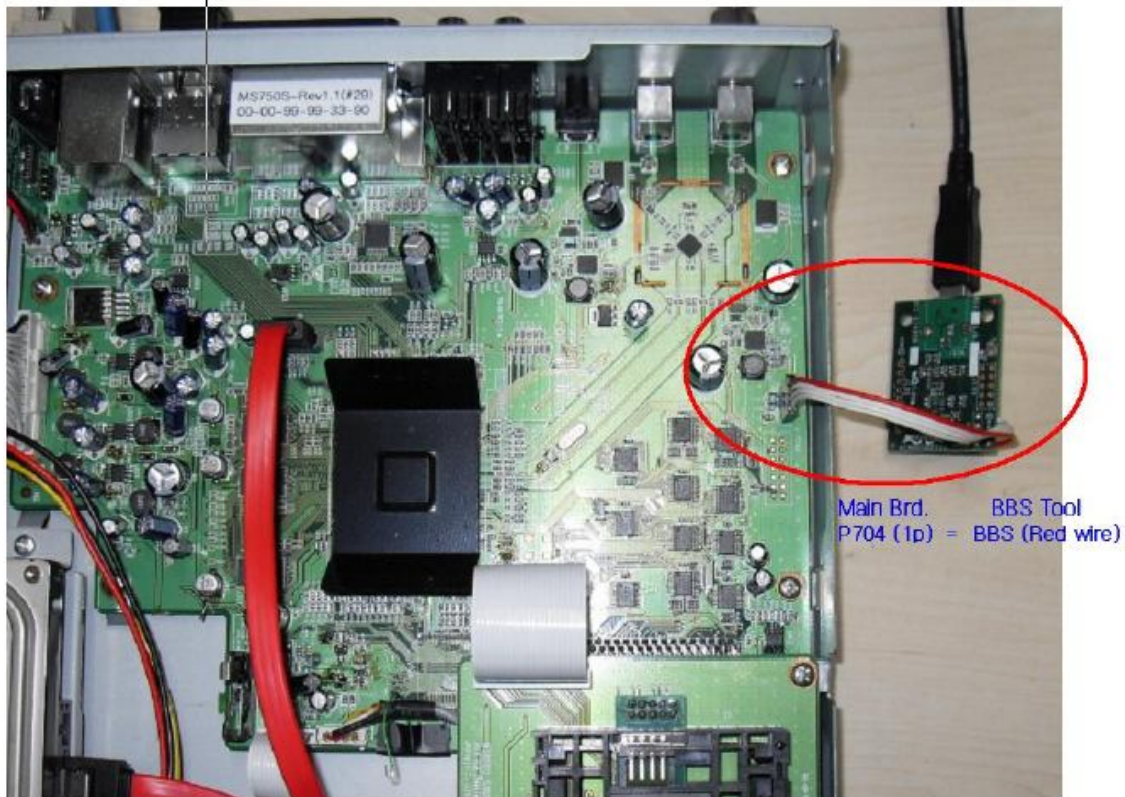
Drivers for the Cypress board (Broadcom studio 3 will now know the cypress board).

5. Now we need to make a cable between the cypress board and the VU+.

In the how to use BBS - SOLO_UNO_DUO_ULTIMO.pdf file you can find pictures where to find the connector for your VU+ on the motherboard.

The picture here is for a DUO

1. Vu+ DUO



The connector for the DUO is P704 and PIN 1 = the red wire

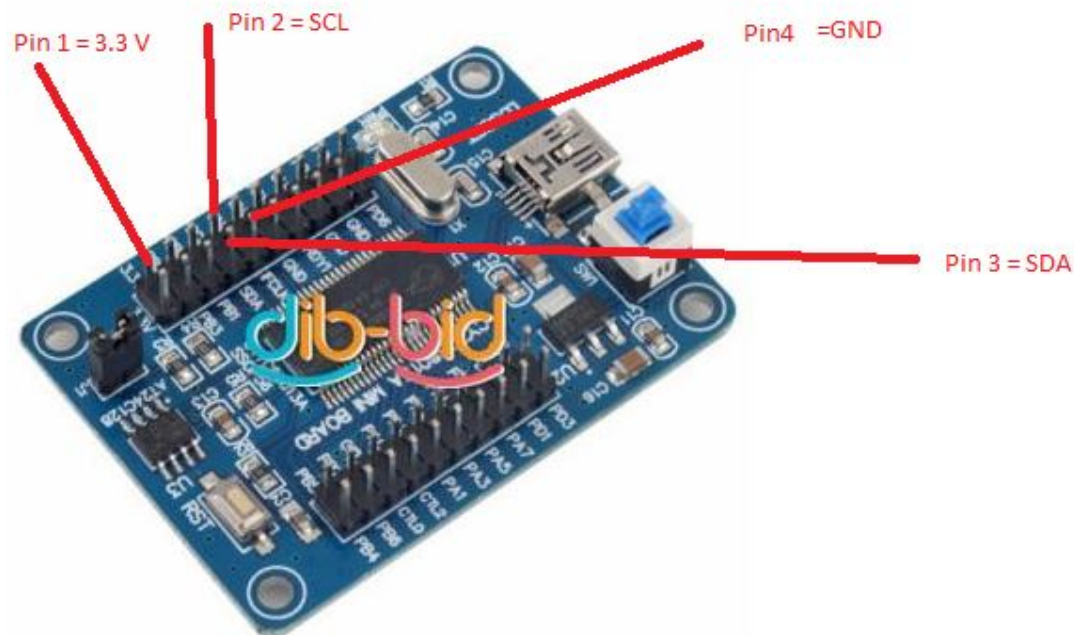
Pin 1 is 3v3V (Red Wire)

Pin 2 is SCL

Pin 3 is SDA

Pin 4 is GND

On the Cypress board you can find the corresponding pins in the next picture



So connect:

Pin1 3.3V VU+ to 3.3V on cypress board

Pin2 SCL VU+ to SCL on cypress board

Pin3 SDA VU+ to SDA on cypress board

Pin4 GND VU+ to GND on cypress board

6: connect the cable between the cypress board and the VU+ (VU+ not on)

7: Start Broadcom studio 3

8: In the menu select :

View => devices => BCM7325 for the VU+ Solo

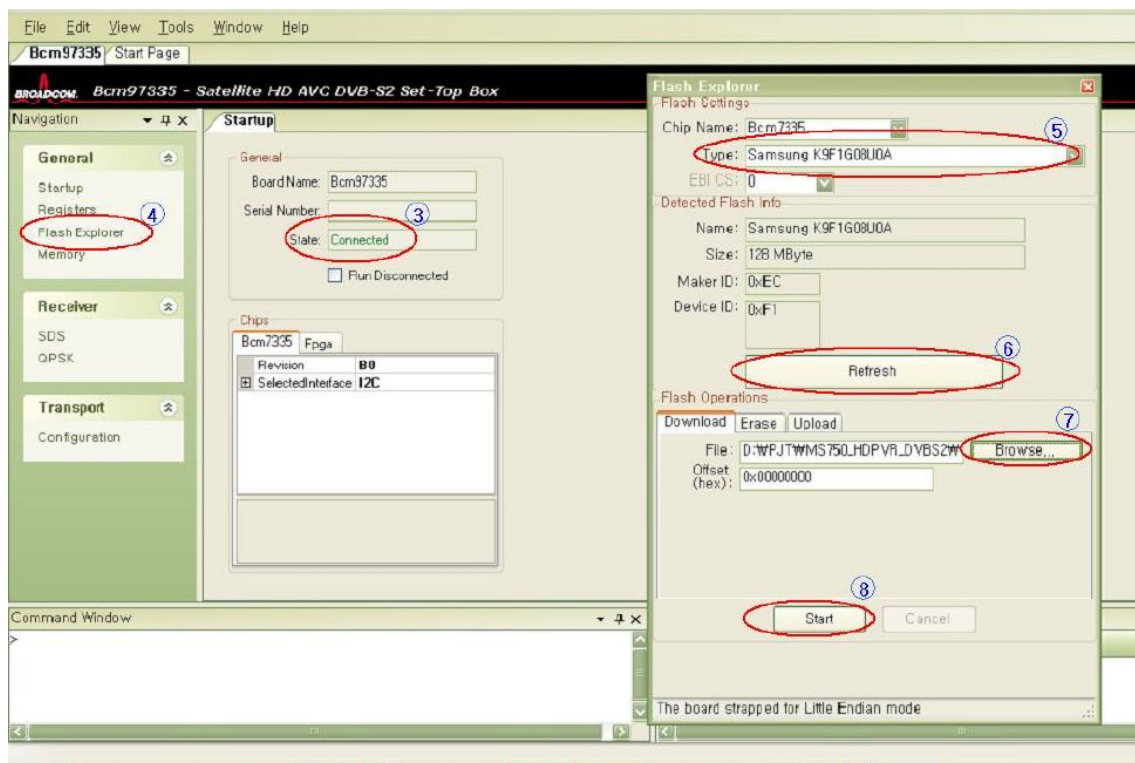
View => devices => BCM7335 for the VU+ Duo

View => devices => BCM7413 for the VU+ Uno

View => devices => BCM7413 for the VU+ Ultimo



9: turn on the VU+ (you shoot see connected 3 in picture)



10: Select "Flash Explorer" (4 in picture)

11: Select "Samsung K9F1G08U0A" in the type field (5 in picture)

12: Select "Refresh" (6 in picture)

13: Select "Browse" (7 in picture) and select the file extracted from :

cfe_Duo.zip for the duo

cfe_Solo.zip for the solo

cfe_Ultimo.zip for the Ultimo

cfe_Uno.zip for the uno

14: Select "Start" (8 in picture) You should now see that the flash is being programmed to the VU+.

15: After the programming is finished turn off the VU+, disconnect the cable to the Cypress board

And turn on the VU+, first you see the red led and then the display says STARTING, and after a while the Display says VU+ DUO.

16: Now you can install your desired firmware image through the USB stick procedure as described on the VUPLUS site.

Greetings Albert and success