

## Setup - FW update

0 To buy USB-Blaster - I used with success this one cheap from ebay



1 Download **Altera 11.0\_quartus\_free\_windows** 2.7 Gb  
<https://www.altera.com/download/software/quartus-ii-we>  
and **fpga\_ver1 FW**  
<http://james.ahlstrom.name/transceiver/index.html>

2 To do cable male-male USB-Blaster to HiQSDR pin 1 to 1 , 2 to 2 and so on 10 pins 2x5

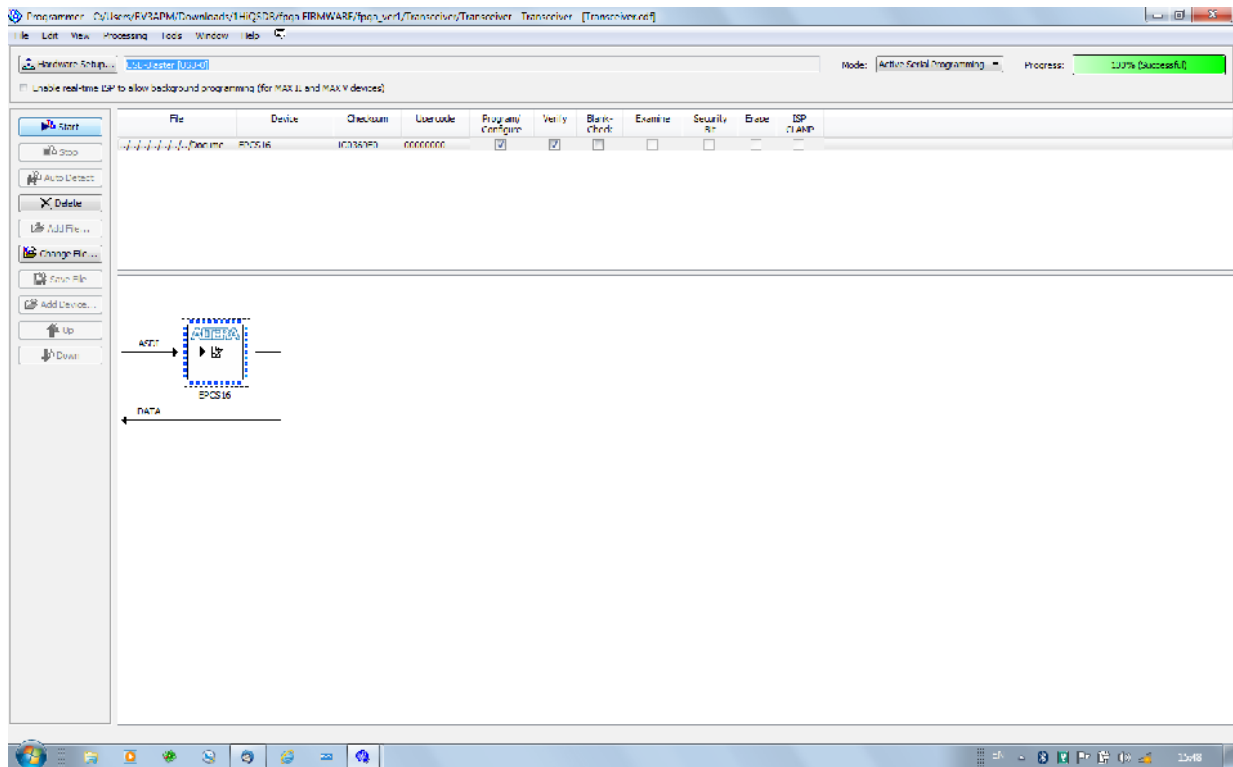


3 Connect cable to USB Blaster and to X4 HiQSDR - refer 10 pin X4 -- GND  
USB Blaster to USB port PC . You not need on this time in LAN connection.

4 Powered HiQSDR board 6V and run Altera software - define USB Altera in Hardware setup

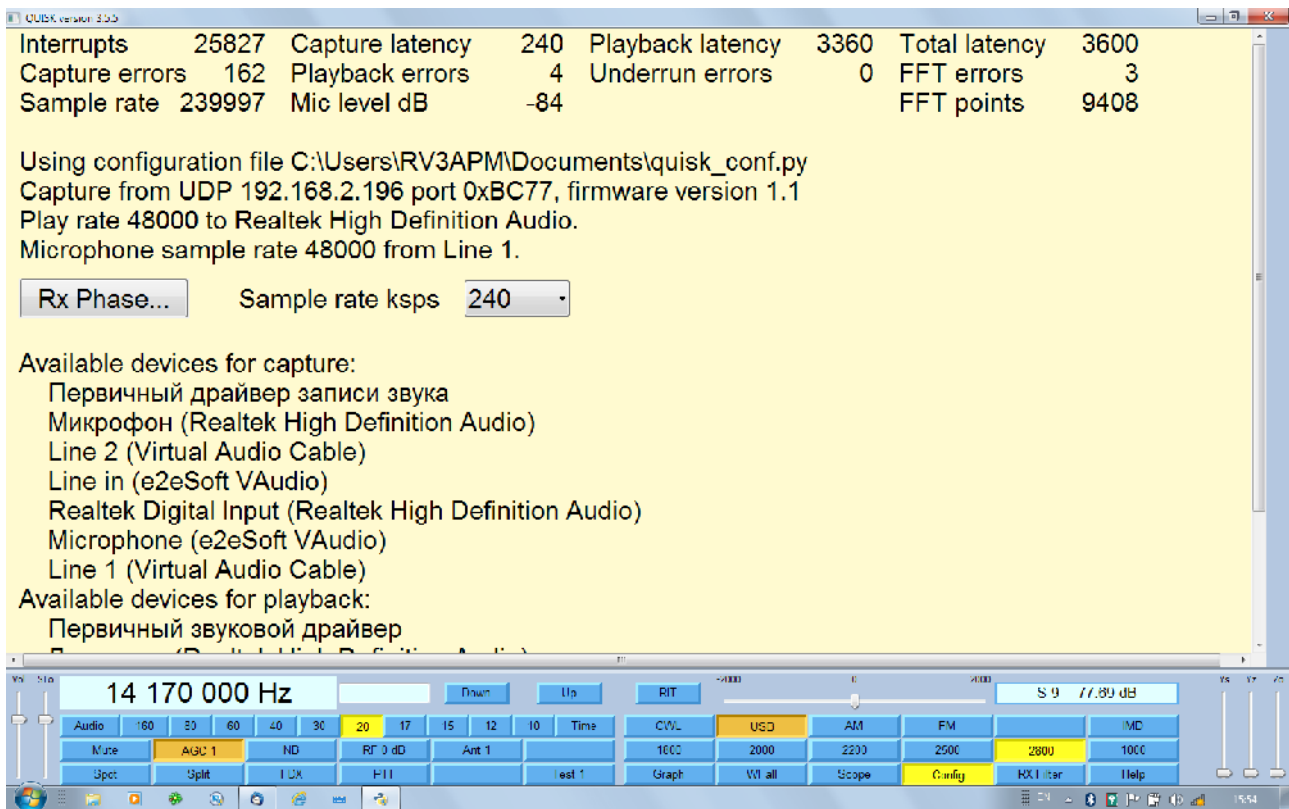
Open file -project Transceiver

Push Start and look bellow



Now go back to working setup for (working setup use straight cable router to PC and to HiQSDR and WiFi PC-HiQSDR also will work )

Run QUIK 3.5.8 – push Config and check FW version



### Calibrate Freq into config file

#### MY value-

rx\_udp\_clock = 122878800 (*for mine was default = 122880000 and error up 150Hz*)  
 $150 \times 8 = 1200$      $122880000 - 1200$

YOU MUST TO DO CHECK – NEED OR NOT IN THIS POINT

Check it for example **with MixW SSTV mode WWV** and VAC output in config file  
 Tune on 14994.100 USB - Line on screen SSTV MIXW must be direct and on waterfall exactly under marker 1900Hz

look :

[http://www.marsregionone.org/MixW\\_Calibrate.html](http://www.marsregionone.org/MixW_Calibrate.html)

More precision you can calibrate with SpectrumLab

<http://www.qsl.net/dl4yhf/spectral1.html>

stereo cable from speaker to Mic or Line IN your sound card  
 use QRSS3 mode

- tune HiQSDR on 135430 Khz in CWU mode and -600 RIT  
 you must to see **center signal from HGA22**

**if not try adjust** rx\_udp\_clock = 122878800

***For LF slow digital mode WSPR -QRSS60 very important frequency stability***

My HiQSDR have + - 0.5 Hz master CVFD Crystal

122.880 MHz clock instability and it depended from temperature

***SO GOOD IDEA PUT BOARD INTO BOX AND CLOSE COVER YOU GOT BETTER STABILITY***



I used Windows 7 32 bit and tested on Ubuntu 11.04 – all working very good

The latest QUISK 3.5.8 have better AGC .

With great success I use remote tune HiQSDR with Wi-Fi routers

**TESTED AND IT OK:**

WiFi router for remote control with HiQSDR-  
ASUS500 and Dlink D615

73! Serge RV3APM