

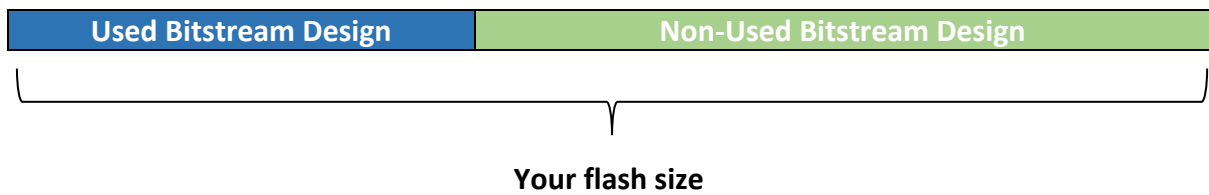
Description

I suspect your flash is not fully erase. That's the reason why you cannot blank check your flash.

For your information, the Programmer Engine supposed **to NOT touch** other flash partition except those defined with bitstream and user data. On the other hand, when you check erase in Quartus Programmer, it only erase based on your JIC bitstream.

For example:

Your used JIC bitstream in your design is in **Blue Color (below diagram)**. And your non-used JIC bitstream in your design is in **Green Color (below diagram)**. If you check (tick) Erase option in Quartus Programmer, it only erase the Blue Part, not your whole flash device.



Thus, I suspect your Non-used Bitstream part (green part) is not fully empty. That's the reason why you cannot blank check your flash device.

Please follow the following workaround to fully erase the Flash device.

Step to fully erase the Flash device.

In my design I used:

FPGA device: Cyclone 10 LP (10CL025Y)

Flash device: EPCQ64

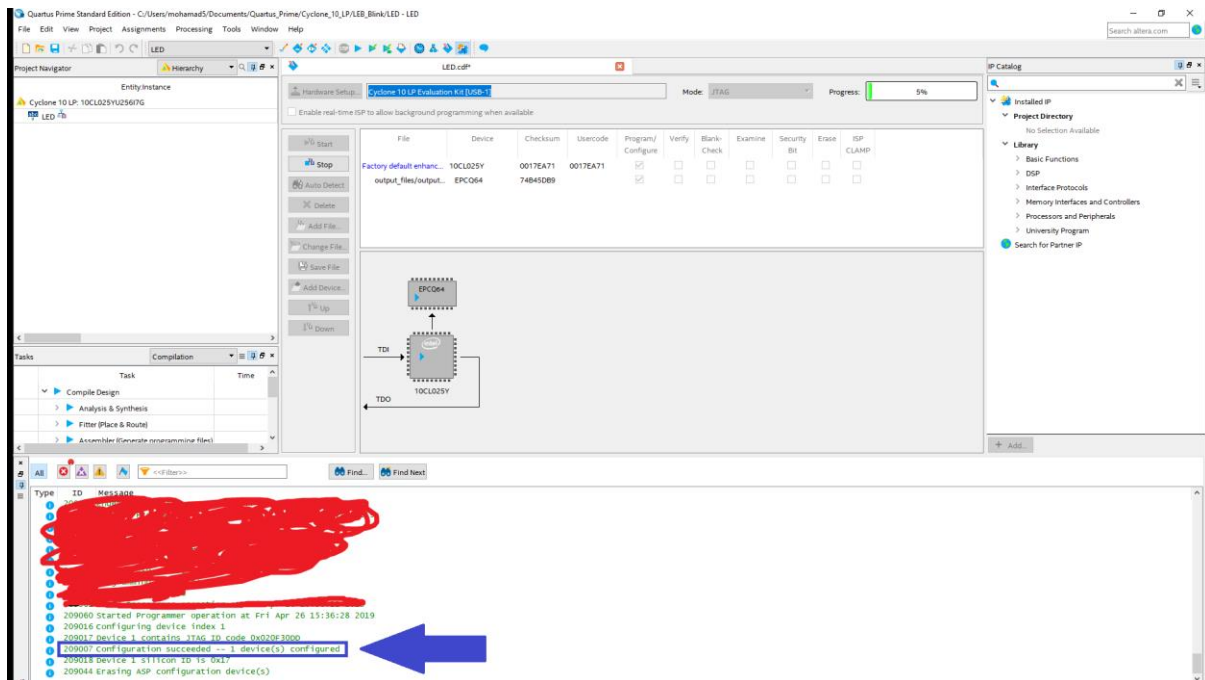
1. Program SFL

Your need to establish the connection between Quartus and Flash device.

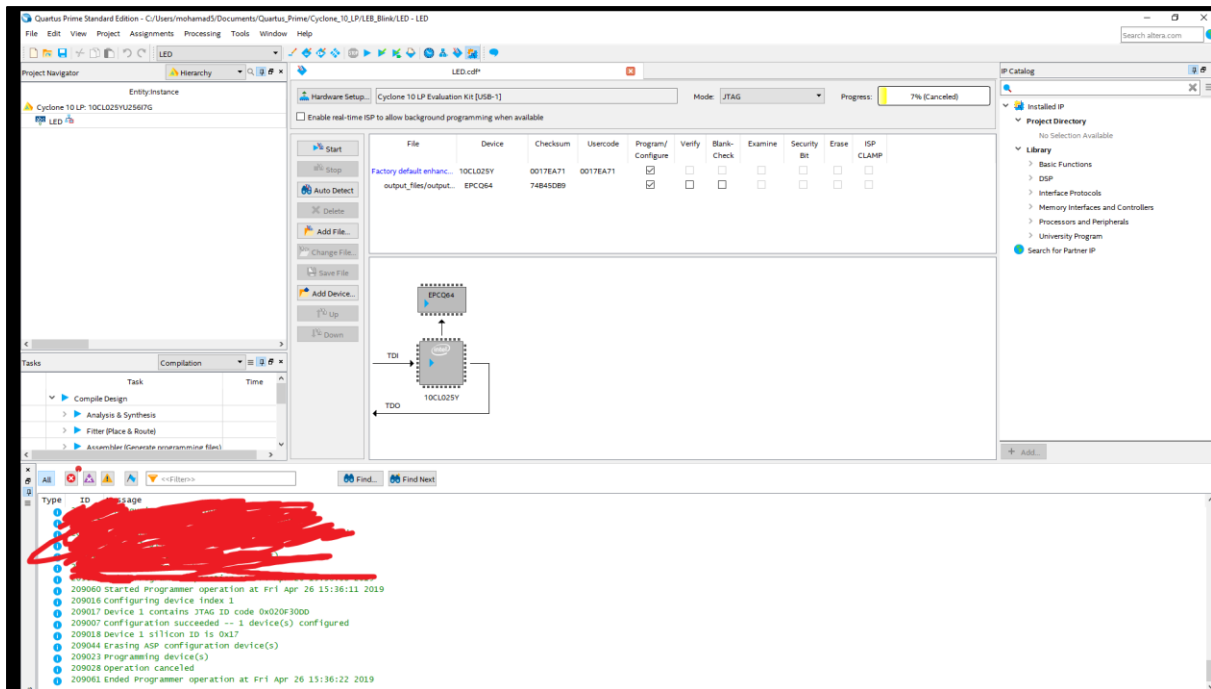
In order to establish the connection, you need to program SFL into your flash.

To program SFL, **select any JIC file** into Quartus Programmer. Then, **program the JIC file**.

After you get the message **"ID 209007: Configuration succeeded – 1 device(s) configured"** (blue rectangle in picture below), you need to **stop** the Quartus Programmer

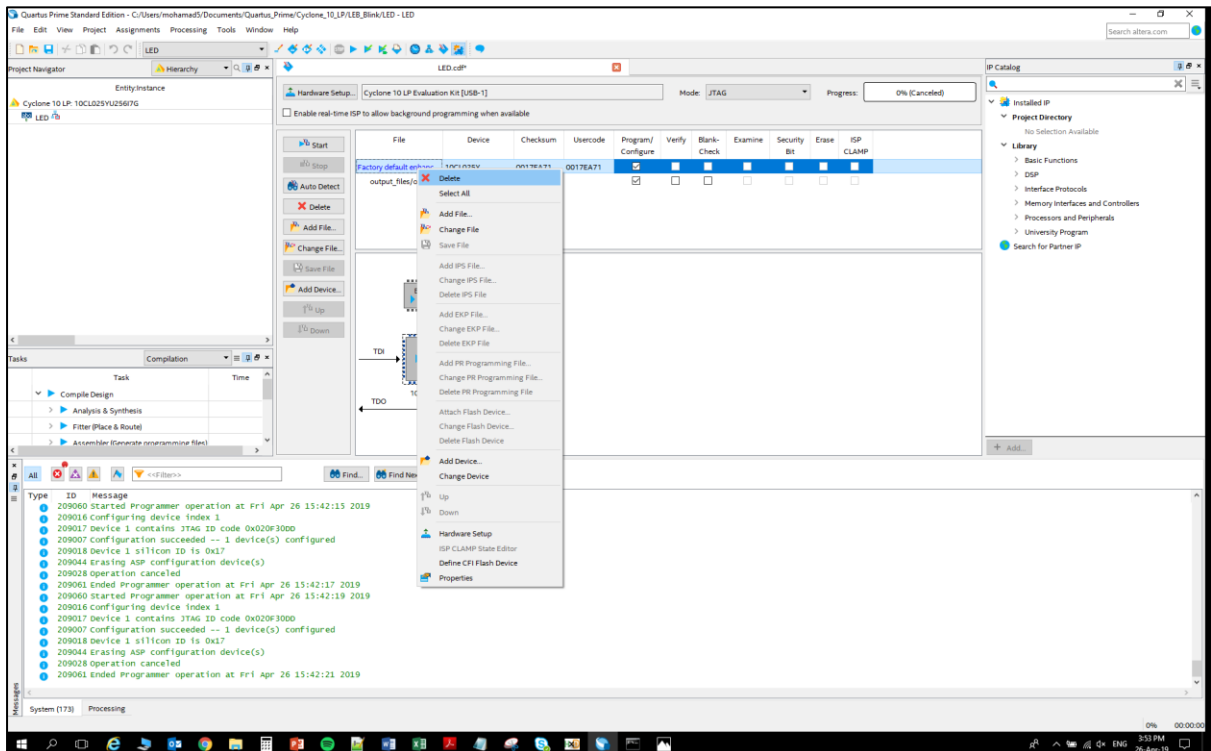


You will get the message “ID 209028: Operation canceled” when you stop the Quartus Programmer

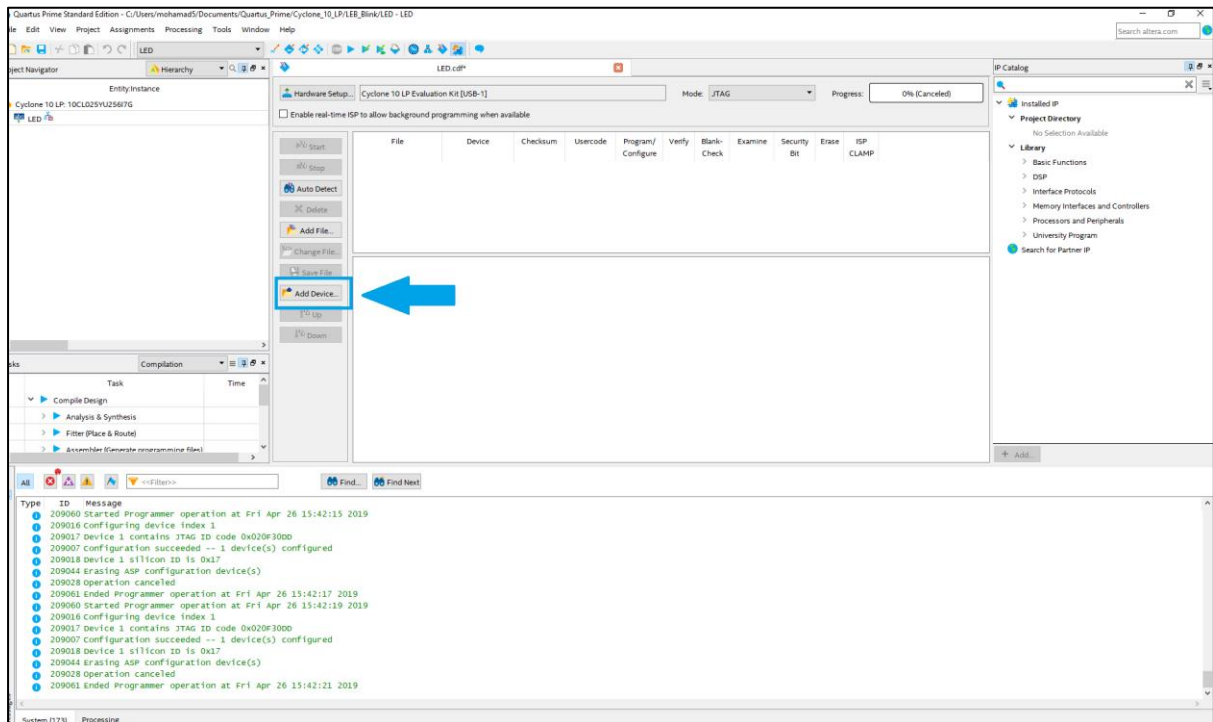


2. Add device

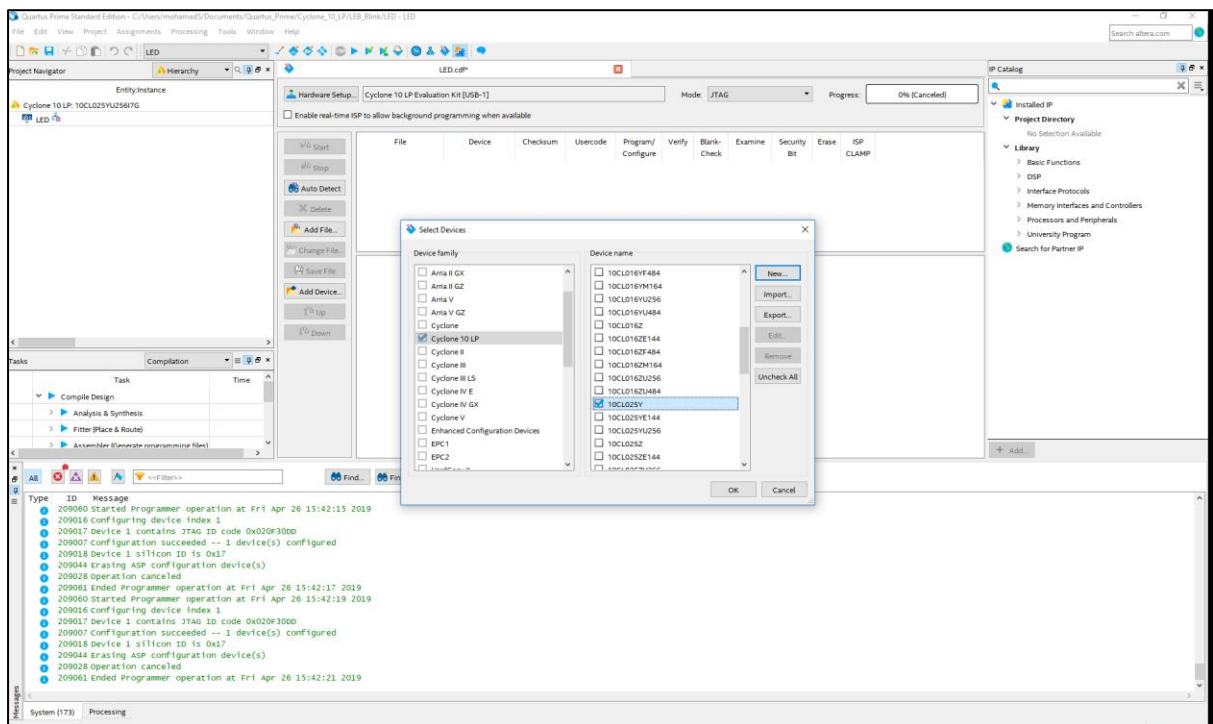
First you need to delete your JIC file. **Right click** and select **delete**.



Then, you will see your Quartus Programmer is empty (as shown in picture below). Next, you need to select the “Add Device..” (blue rectangle)

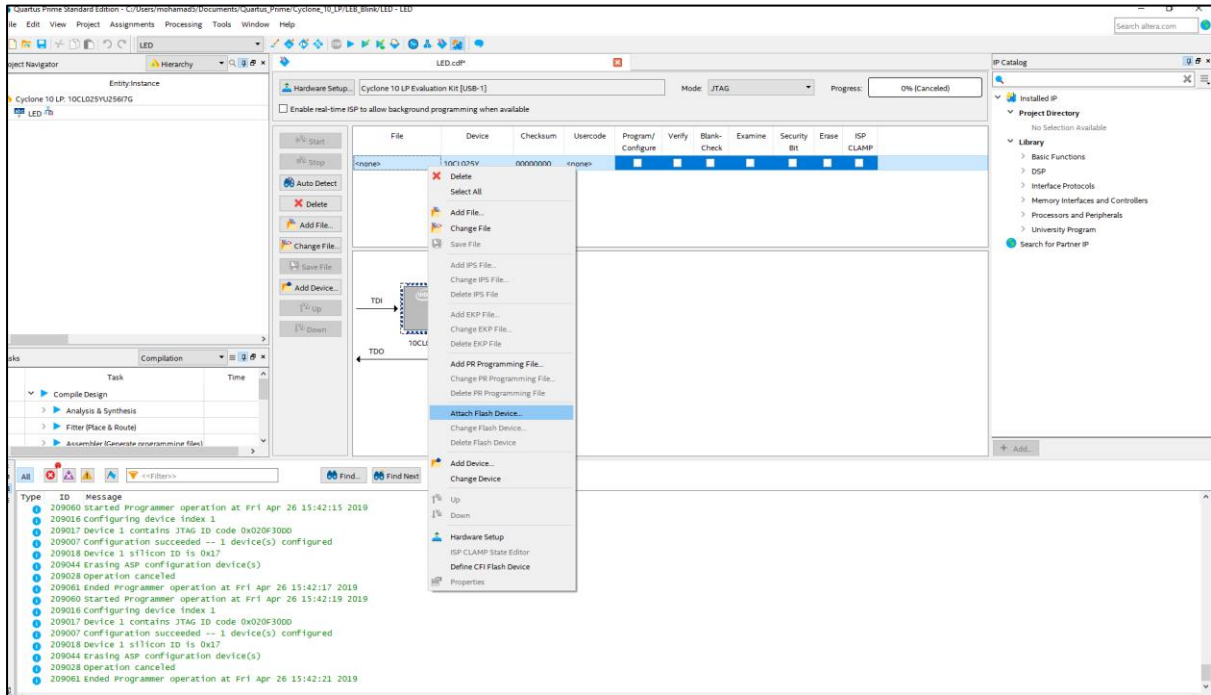


After that, Select your FPGA device (for my design, I select Cyclone 10 LP → 10CL025Y)

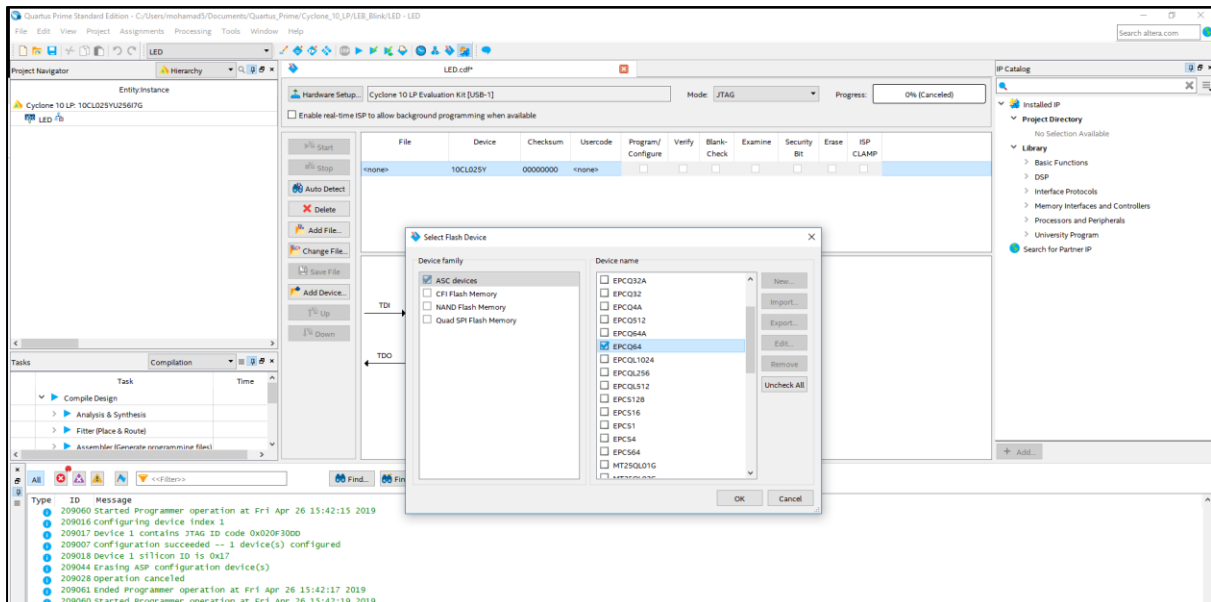


3. Attach Flash device

After add your FPGA, **right click** at the FPGA device and select **“Attach Flash device”**.



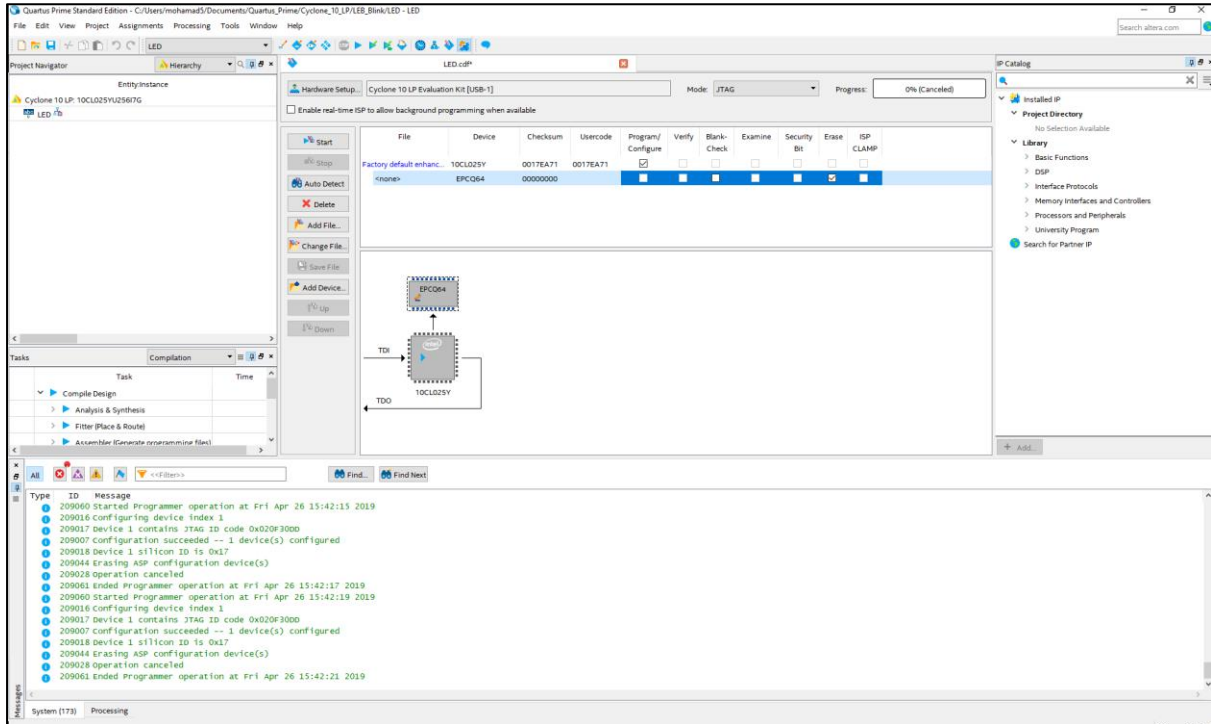
Then, **Select** your FPGA device (for my design, I select ASC devices → EPCQ64)



4. Erase

After include your FPGA and flash, **Tick erase** (at flash device) and **Tick Program/configure** (at FPGA device). Then, press start button.

You will observe that this erase will take time **longer** than normal JIC file erase.



After progress reach 100% (Successful), your flash is fully erase.

