



FIND YOUR DIGITAL SOLUTION!

MSPG-8100S DISPLAYPORT FPGA UPGRADE MANUAL



Master Co., Ltd
Kenny, Son

180528

www.Ltdmaster.com



1. Program Install



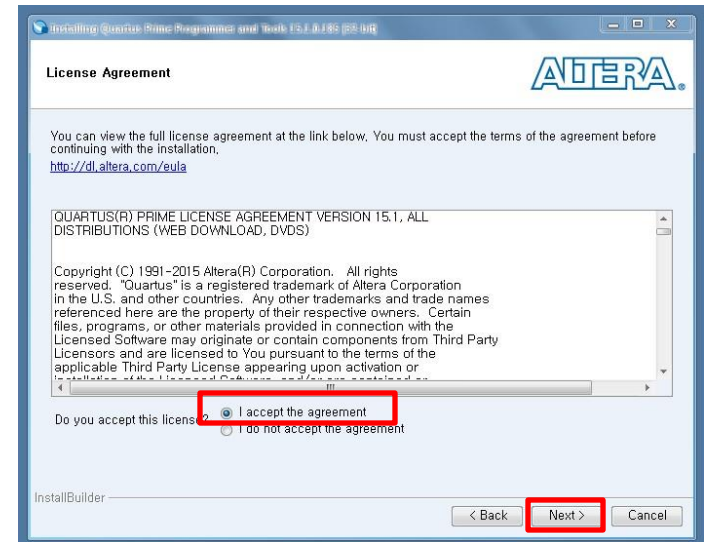
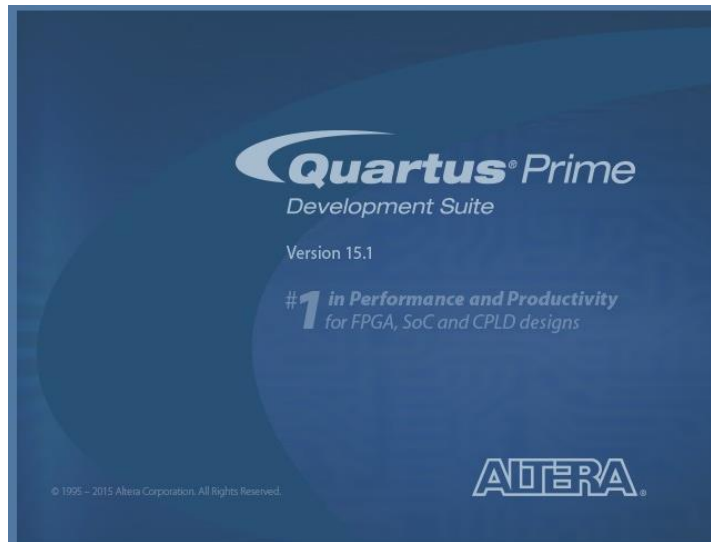
1. Please download FPGA update program at below.

<http://www.ltdmaster.com/son/UPDATE%20PROGRAM%20TOOL/QuartusProgrammerSetup-15.1.0.185-windows32.exe>

2. Please install on your PC. (Windows OS version over 7 or 10)

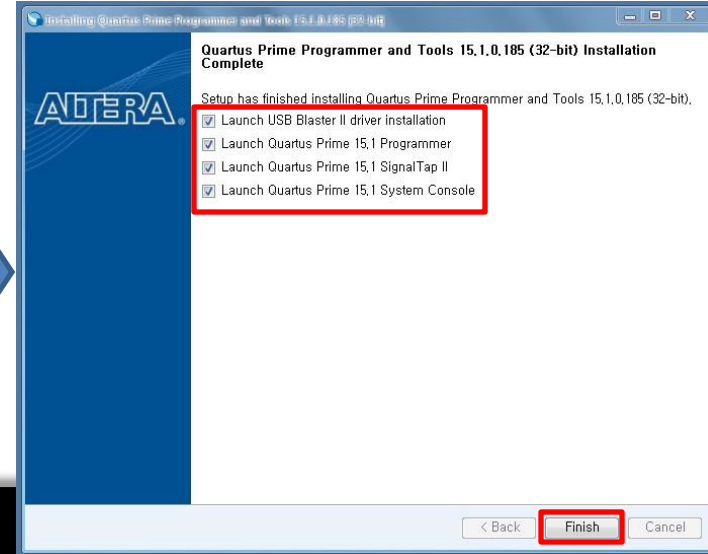
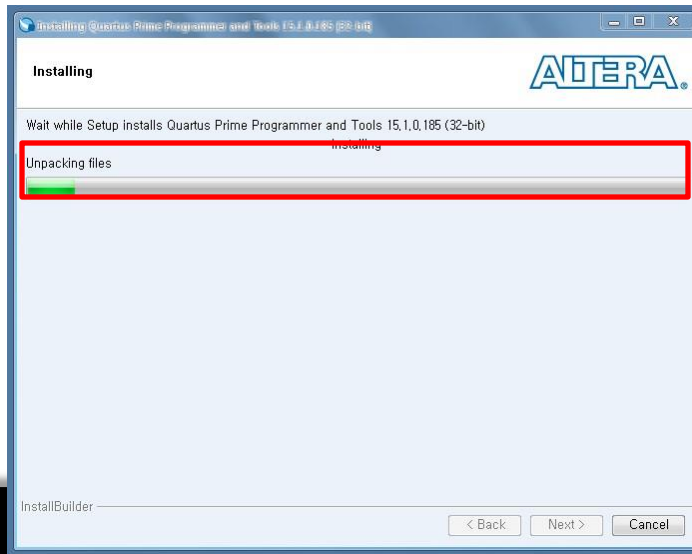
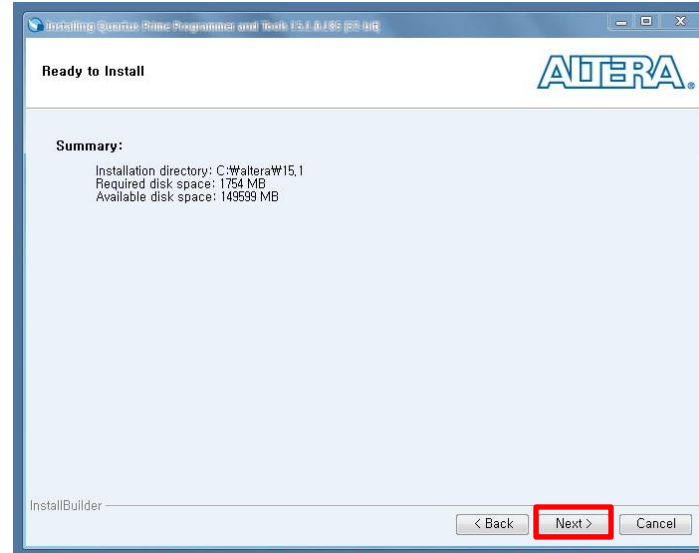


(344,179KB)





1. Program Install





1. Program Install



장치 드라이버 설치 마법사 시작

이 마법사는 사용자가 일부 컴퓨터 장치에 필요한 소프트웨어 드라이버를 설치하도록 도와줍니다.

계속하려면 [다음]을 클릭하십시오.

< 뒤로(B) **다음(N) >** 취소



장치 드라이버 설치 마법사 완료

컴퓨터에 드라이버를 설치했습니다.

이제 장치를 컴퓨터에 연결할 수 있습니다. 장치와 함께 설명서가 제공되었으면 장치를 사용하기 전에 설명서를 먼저 읽어보십시오.

드라이버 이름	상태
✓ Altera (WinUSB) JT...	사용할 수 있음

< 뒤로(B) **마침** 취소



2. Set up USB blaster Driver



1. Please open the "device manger" on you PC and install to USB driver.

The screenshot shows the Windows Device Manager window with the 'USB-Blaster(Altera)' device highlighted under 'Other devices'. The 'USB-Blaster(Altera) 속성' (Properties) window is open, showing the 'General' tab with the following information:

- 장치 유형: 기타 장치 (Device type: Other device)
- 제조업체: 알 수 없음 (Manufacturer: Unknown)
- 위치: Port_#0002, Hub_#0004 (Location: Port_#0002, Hub_#0004)

The '장치 상태' (Device status) section contains the following text:

이 장치에 대한 드라이버가 설치되지 않았습니다. (코드 28)
 장치 정보 집합 또는 요소에 대해 선택한 장치가 없습니다.
 이 장치에 대한 드라이버를 찾으려면 [드라이버 업데이트]를 클릭하십시오.

The '드라이버 업데이트(U)...' button is highlighted with a red box.

Overlaid on the Device Manager is the '드라이버 소프트웨어 업데이트 - USB-Blaster(Altera)' (Driver Software Update - USB-Blaster(Altera)) wizard. It asks '드라이버 소프트웨어는 어떻게 검색합니까?' (How do you want to search for driver software?). The options are:

- 업데이트된 드라이버 소프트웨어 자동으로 검색(S) (Search for updated driver software automatically) - This option is selected.
- 컴퓨터에서 드라이버 소프트웨어 찾아보기(R) (Browse for driver software on the computer) - This option is highlighted with a red box.

The '취소' (Cancel) button is visible at the bottom right of the wizard.



2. Set up USB blaster Driver



2. USB Blaster driver update as below.

The screenshot shows the Windows Device Manager window with the 'USB-Blaster(Altera)' device selected under 'Other devices'. The device properties window is open, showing the 'Driver' tab. The device name is 'USB-Blaster(Altera)', type is 'Other device', manufacturer is '알 수 없음', and location is 'Port.#0002,Hub.#0004'. The device status message states: '이 장치에 대한 드라이버가 설치되지 않았습니다. (코드 28) 장치 정보 집합 또는 요소에 대해 선택한 장치가 없습니다. 이 장치에 대한 드라이버를 찾으려면 [드라이버 업데이트]를 클릭하십시오.' The '드라이버 업데이트(U)...' button is highlighted with a red box.

The '드라이버 소프트웨어 업데이트 - USB-Blaster(Altera)' wizard is also shown, displaying the message: '컴퓨터에서 드라이버 소프트웨어를 찾아봅니다. 다음 위치에서 드라이버 소프트웨어 검색: C:\altera'. The '찾아보기(R)...' button is visible.

The '폴더 찾아보기' dialog box is open, showing the file system structure. The path '로컬 디스크 (C:) > altera' is selected and highlighted with a red box. The search results show a folder named 'altera' under '로컬 디스크 (C:)', which is also highlighted with a red box. The search path is 'altera'.

At the bottom of the screen, the product ID '제품 ID: 00426-065-3865337-86105' and the product key '제품 키 변경' are visible.

On the bottom left, there are links for '참고 항목', '관리 센터', 'Windows Update', and '성능 정보 및 도구'.



2. Set up USB blaster Driver



2. USB Blaster driver update as below.

The screenshot shows the Windows Device Manager window with the 'USB-Blaster(Aaltera)' device selected. The 'Properties' dialog box is open, showing the 'Driver' tab. The device name is 'USB-Blaster(Aaltera)', type is 'Other device', manufacturer is 'Unknown', and location is 'Port_#0002.Hub_#0004'. The 'Device status' section indicates that no driver is installed (code 28) and provides instructions to click 'Update Driver'.

The 'Driver Software Update Wizard' is also shown, displaying the message: '컴퓨터에서 드라이버 소프트웨어를 찾아봅니다.' (Searching for driver software on the computer). The search location is set to 'C:\Waltera' and the option '하위 폴더 포함(I)' (Include subfolders) is checked. The '다음(N)' (Next) button is highlighted.



2. Set up USB blaster Driver

2. USB Blaster driver update as below.

The screenshot shows the Windows Device Manager window with the 'USB-Blaster(Altera)' device selected. The 'Properties' window for this device is open, showing the 'Driver' tab. The device name is 'USB-Blaster(Altera)', its type is '기타 장치' (Other device), and its location is 'Port_#0002, Hub_#0004'. The device status is '이 장치에 대한 드라이버가 설치되지 않았습니다. (코드 28)' (No driver is installed for this device. (Code 28)).

The 'Driver Software Update - USB-Blaster(Altera)' wizard is running, displaying '드라이버 소프트웨어 설치 중...' (Installing driver software...). A security warning dialog box is also present, asking '이 장치 소프트웨어를 설치하시겠습니까?' (Do you want to install this device software?). The dialog shows the name 'Altera USB-Blaster Device Driver Package' and the publisher 'Delaware Altera Corporation'. A checkbox labeled '"Delaware Altera Corporation"의 소프트웨어는 항상 신뢰(A)' (Software from "Delaware Altera Corporation" is always trusted) is checked. The '설치(I)' (Install) button is highlighted with a red box.



2. Set up USB blaster Driver



2. USB Blaster driver install completed.

The screenshot displays the Windows Device Manager window with the 'Sound, video and game controllers' category expanded. The 'Altera USB-Blaster' device is highlighted with a red box. A 'USB-Blaster(Altera) 속성' (Properties) window is open, showing the device name, type, manufacturer, and location. A 'Driver Software Update - Altera USB-Blaster' dialog box is also open, displaying a message in Korean: '드라이버 소프트웨어를 업데이트했습니다. 다음 장치의 드라이버 소프트웨어 설치를 완료했습니다.' (Updated driver software. Completed driver software installation for the next device.) with 'Altera USB-Blaster' listed below. The dialog box has a red border and a '닫기(C)' (Close) button.



3. Connection

1. Please turn off MSPG first and
Connect to on your PC USB port.←

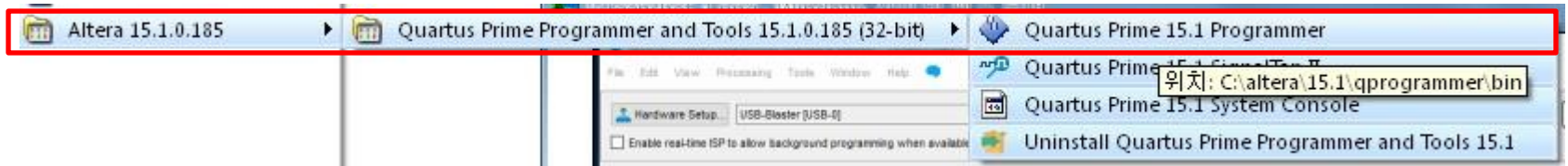




4. Displayport DP FPGA update



1. Run to “Quartus Prime 15.1 Programmer”

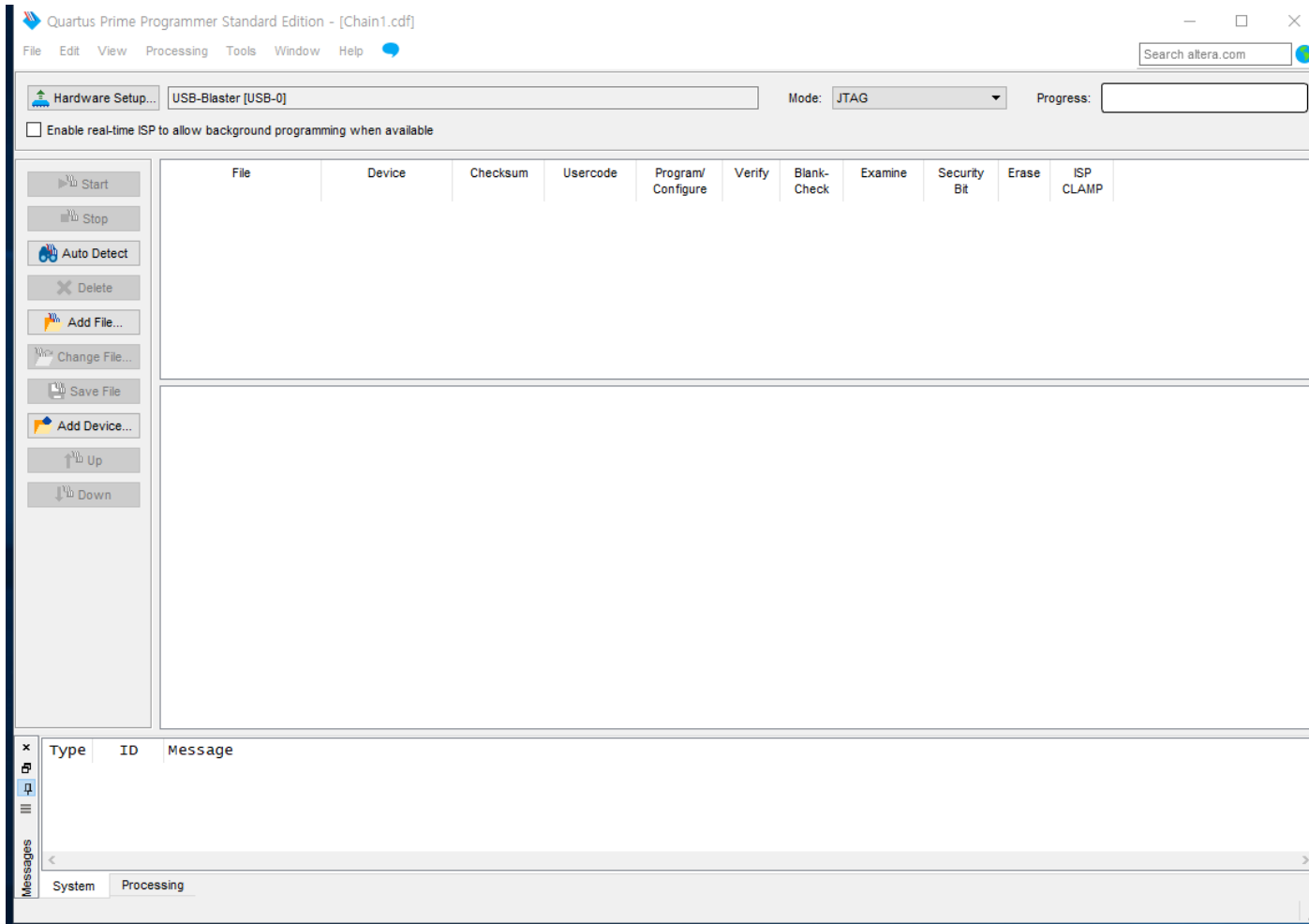




4. Displayport DP FPGA update



2. After run to “Quartus Prime 15.1 Programmer” picture.





4. Displayport DP FPGA update



3. Push “Hardware Setup…” → select to “USB-Blaster (ISB-0)” → Click “Close”

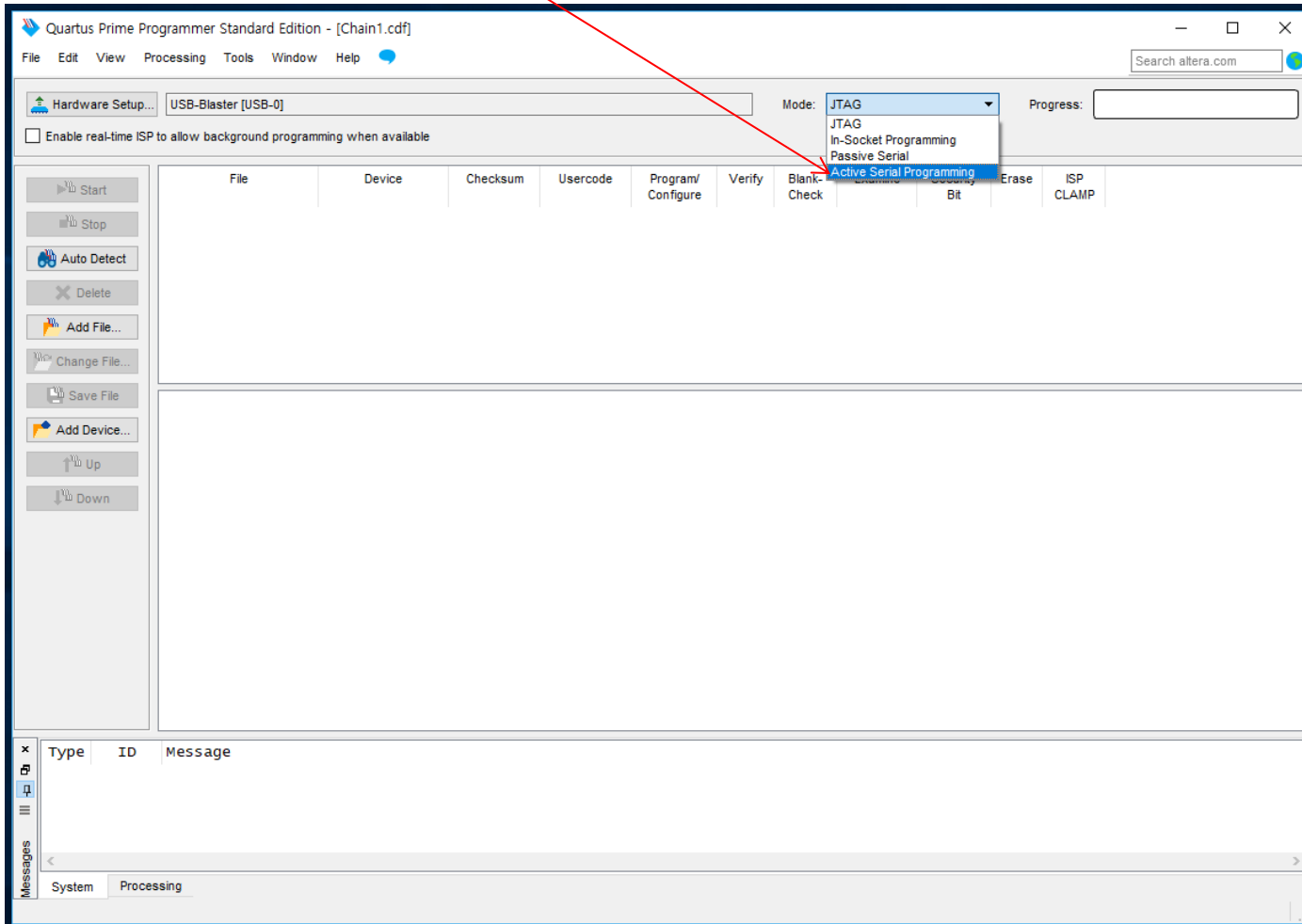
The screenshot shows the Quartus Prime Programmer Standard Edition interface. The main window title is "Quartus Prime Programmer Standard Edition - [Chain1.cdf]". The menu bar includes File, Edit, View, Processing, Tools, Window, and Help. The hardware setup bar shows "USB-Blaster [USB-0]" and "Mode: JTAG". A "Hardware Setup..." button is highlighted with a red arrow. The "Hardware Setup" dialog box is open, showing "Hardware Settings" and "JTAG Settings" tabs. The "Currently selected hardware:" dropdown is set to "USB-Blaster [USB-0]". The "Available hardware items" list shows "USB-Blaster" with "Server: Local" and "Port: USB-0". A red arrow points to the "USB-Blaster [USB-0]" item in the list. Another red arrow points to the "Close" button at the bottom right of the dialog box. The background window shows a table with columns: File, Device, Checksum, Usercode, Program/Configure, Verify, Blank Check, Examine, Security Bit, Erase, and ISP CLAMP. The Messages panel at the bottom shows "System" and "Processing" tabs.



4. Displayport DP FPGA update



3. Select Mode and change “Active Serial Programming”

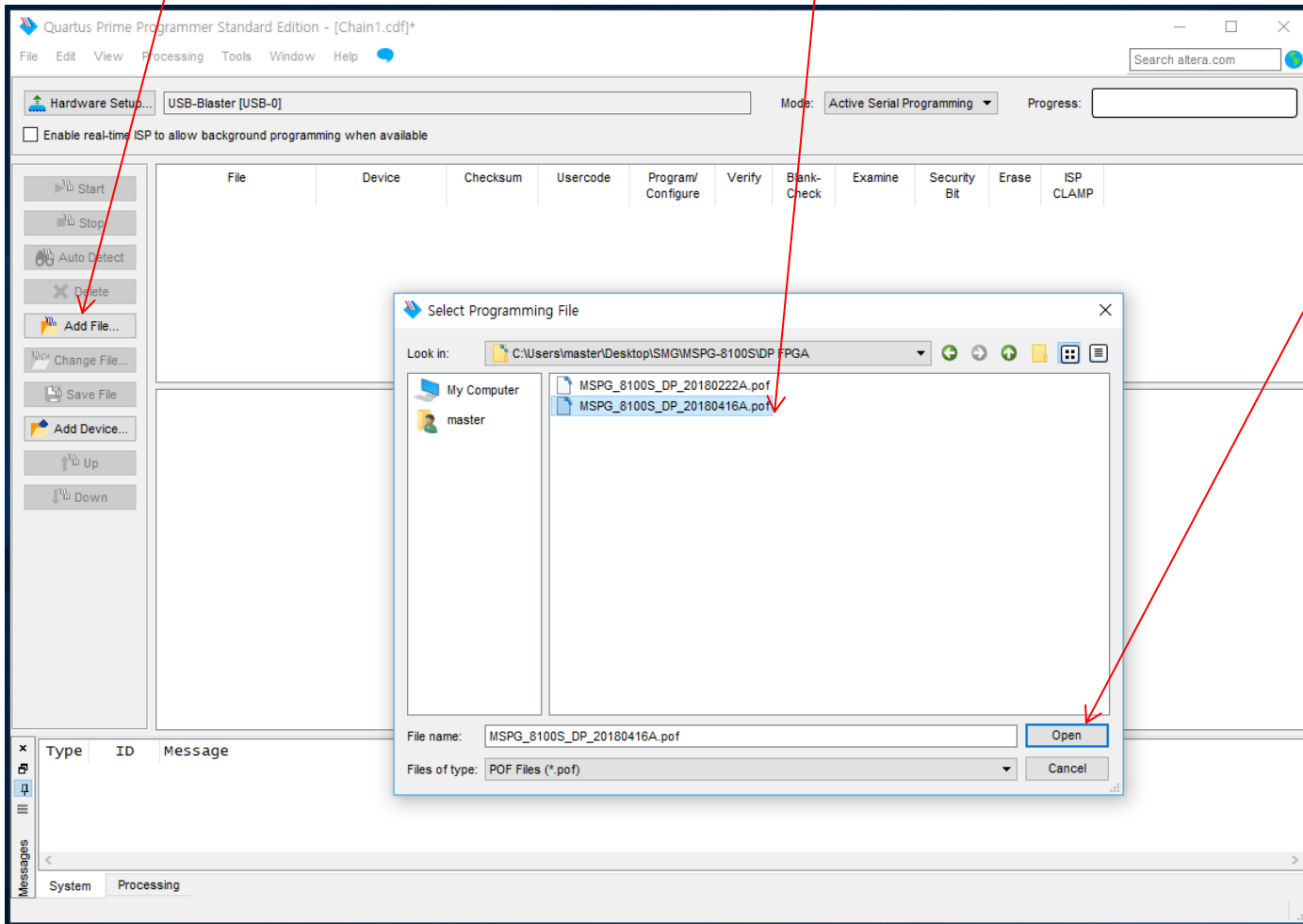




4. Displayport DP FPGA update



4. Push “Add File” Mode and open the “MSPG_8100S_DP_20180418A.pof” as Master Co., Ltd given → Open





4. Displayport DP FPGA update



5. Click “Program/Configure” and push the “Start”

The screenshot shows the Quartus Prime Programmer Standard Edition interface. The hardware setup is configured for USB-Blaster [USB-0] in Active Serial Programming mode. A table lists the files to be programmed, with the first row selected. The 'Program/Configure' checkbox is checked. A diagram below the table shows the connection between the ASDI and the EPCQ256 device, with DATA flow indicated.

File	Device	Checksum	Usercode	Program/Configure	Verify	Blank-Check	Examine	Security Bit	Erase	ISP CLAMP
C:/Users/master/Desktop...	EPCQ256	CE342E2E	00000000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



4. Displayport DP FPGA update



6. Program will be update.

The screenshot shows the Quartus Prime Programmer Standard Edition interface. The hardware setup is USB-Blaster [USB-0] in Active Serial Programming mode. The progress bar indicates 1% completion. The device table shows the following details:

File	Device	Checksum	Usercode	Program/Configure	Verify	Blank-Check	Examine	Security Bit	Erase	ISP CLAMP
C:/Users/master/Desktop...	EPCQ256	CE342E2E	00000000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The diagram below the table shows the ASDI (Active Serial Data Interface) connection to the EPCQ256 device, with ASDI data going to the device and DATA being received from it.

The message log at the bottom shows the following entries:

Type	ID	Message
Info	209060	Started Programmer operation at Thu Apr 26 10:27:37 2018
Info	209018	Device 1 silicon ID is 0x19
Info	209044	Erasing ASP configuration device(s)



4. Displayport DP FPGA update



7. Update End status.

Quartus Prime Programmer Standard Edition - [Chain1.cdf]*

Hardware Setup... USB-Blaster [USB-0] Mode: Active Serial Programming Progress: 100% (Successful)

File	Device	Checksum	Usercode	Program/Configure	Verify	Blank-Check	Examine	Security Bit	Erase	ISP CLAMP
C:/Users/master/Desktop...	EPCQ256	CE342E2E	00000000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ASDI → EPCQ256 ← DATA

Type	ID	Message
1	209024	Programming device 1
1	209018	Device 1 silicon ID is 0x19
1	209011	Successfully performed operation(s)
1	209061	Ended Programmer operation at Thu Apr 26 10:32:32 2018



4. Displayport DP FPGA update



8. Please turn off the MSPG and disconnect from MSPG to PC.
9. Please copy latest firmware “Firmware_only_2_0_09.mspg8100”
(Master Co., Ltd will provide you) on your USB memory Stick.
10. Please turn on the MSPG and insert USB Memory stick to MSPG’s rear USB port.



11. Push K/B button and push the Program-Copy.
12. Make sure “USB0_1” is created or not on the list.
(Press key if you can’t find “USB0_1” on the list after connection.)
13. Select “USB0_1” then press enter key.
14. Select program file “Firmware_only_2_0_09.mspg8100” and press enter key for program update.
(Password is set up to “8880”)
15. Update will begin to “File System Erase Start” on The LCD Screen.
16. “Please power turn off and then on!!” will be showing on the LCD screen.
17. Please turn off and turn on.



4. Check the updated version.



18. Please check the firmware version as below.



<BEFORE>

HW D 1.2 / A 1.1 SW 1.0.50

<AFTER>

HW DP1.2 / D1.2 / A1.1 SW2.0.08

19.End