SILICONARTS

RayCore® MC Development Kit

Quick Start Guide

Siliconarts, Inc.
5F, 532, Eonju-ro, Gangnam-gu,
Seoul, Republic of Korea (06147)
Tel. +82–2–470–2829
Fax. +82–2–6008–1991
URL. http://www.siliconarts.com

Hardware Installation

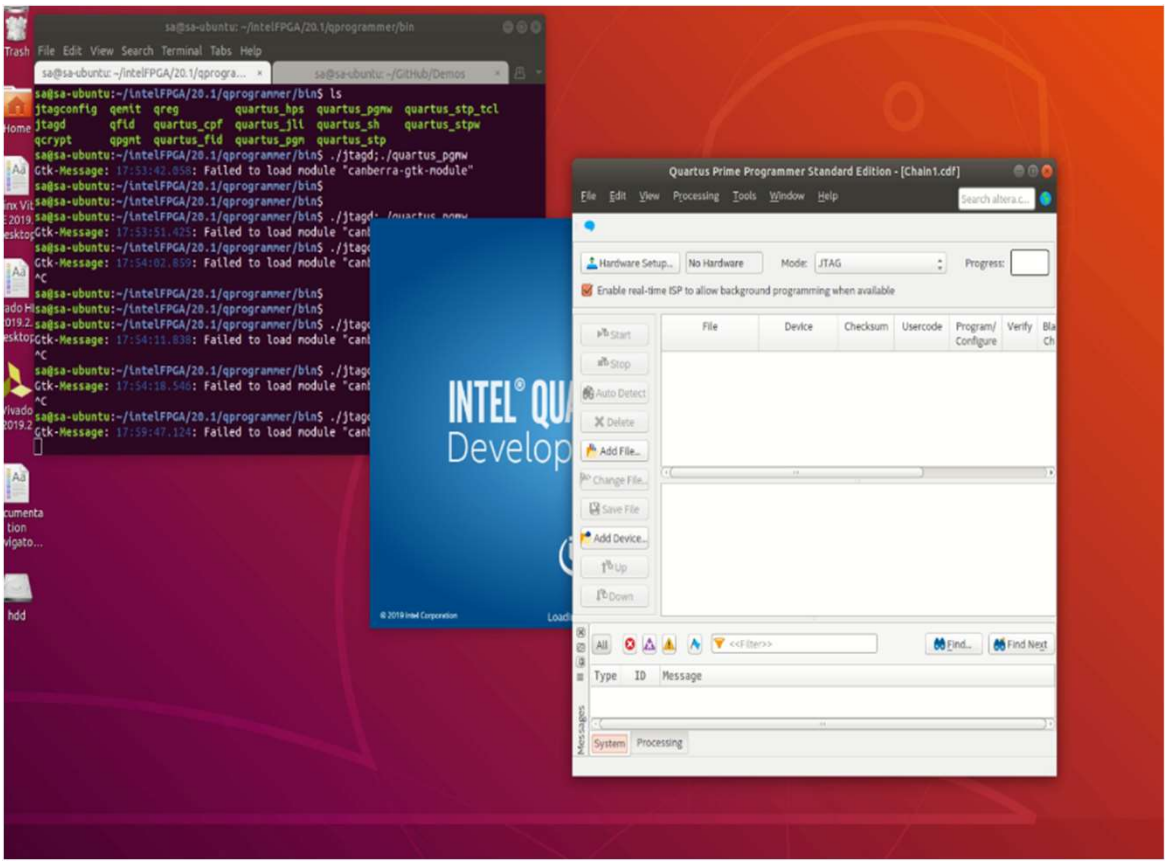
FPGA Hardware Setup

Currently set up the Altera Development Kit (Arria 10, Arria 10 PAC) is used Intel Quartus Programmer(20.1) tool. This method is connected with PC between FPGA Board using jtag for upload sof file. User can be set up Hardware follow below steps. For specific information, Please refer Altera user Guide.

- Arria 10 Starter Board : User Guide (https://www.intel.com/content/dam/www/programmable/us/en/pdfs/literature/ug/ug_a10-fpga-prod-devkit.pdf#page=75&zoom=100,0,673)

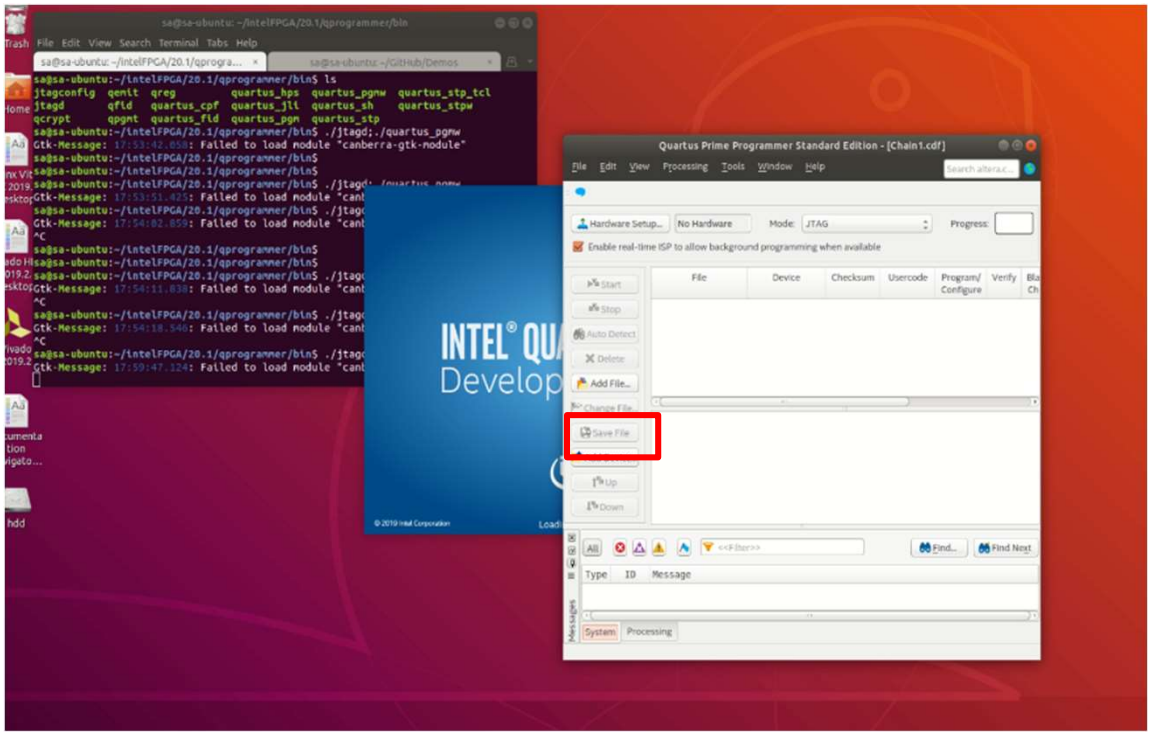
Step. 1
First, install the Quartus Prime Programmer 20.1 by below link. And then go to installation directory and execute 2 files 'jtagd', 'quartus_pgmw'.
Interl Quartus Prime Programmer 20.1:
(https://fpgasoftware.intel.com/20.1/?edition=pro&platform=linux)

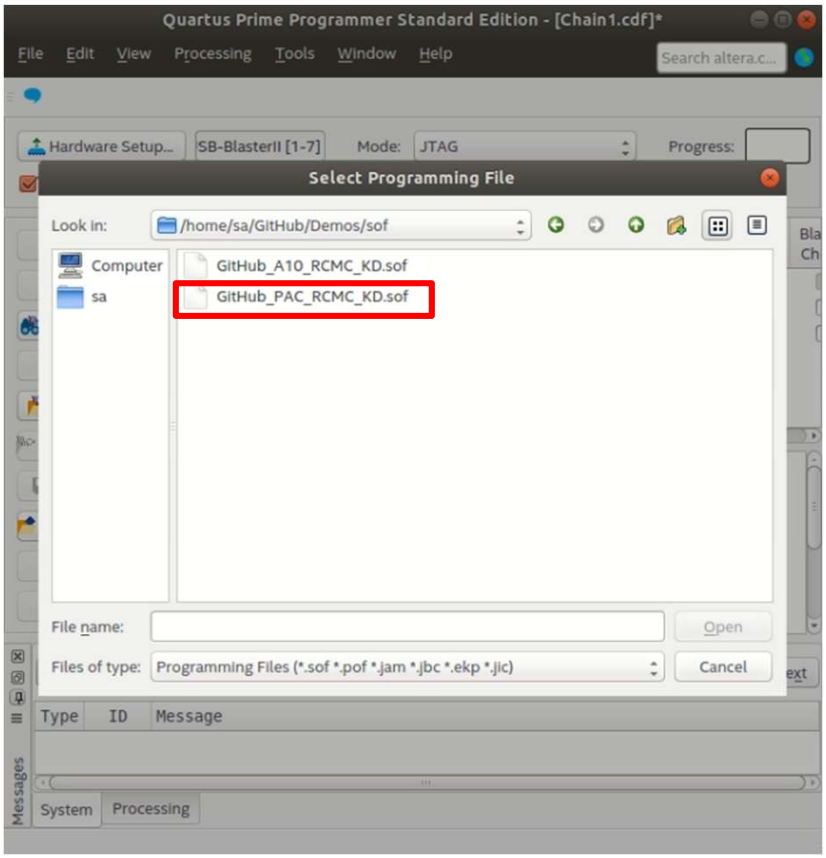
$cd <*User Dirtctory*>/ /intelFPGA/20.1/qprogrammer/bin
$./jtagd
$./quartus_pgmw



Step. 2 (※ Intel Arria10 PAC)
Import FPGA sof file, to click the icon Add file..
It can be found in the below directory

Intel Arria10 PAC : <*User Directory*>/Demos/sof/GitHub_PAC_RCMC_KD.sof

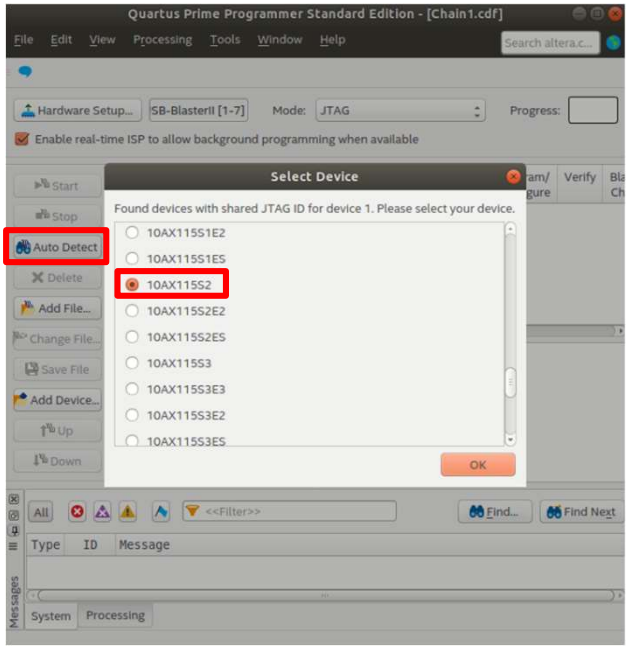




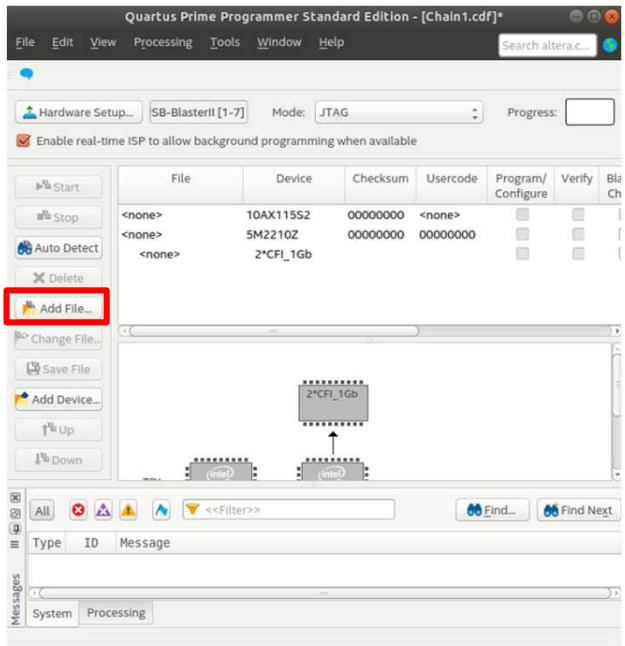
Step. 2 (※ Intel Arria10 FPGA)
In arria 10 FPGA case, For detect FPGA device, to click the icon ‘Auto Detect’ then select ’10AX115S2’.
Import FPGA sof file, to click the icon ‘Add file..’
It can be found in the below directory

Intel Arria10 : <*User Directory*>/Demos/sof/GitHub_A10_RCMC_KD.sof

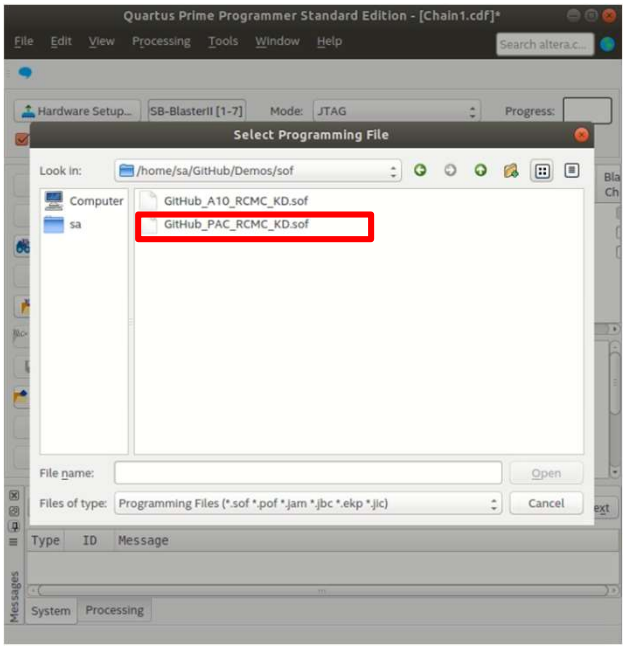
①



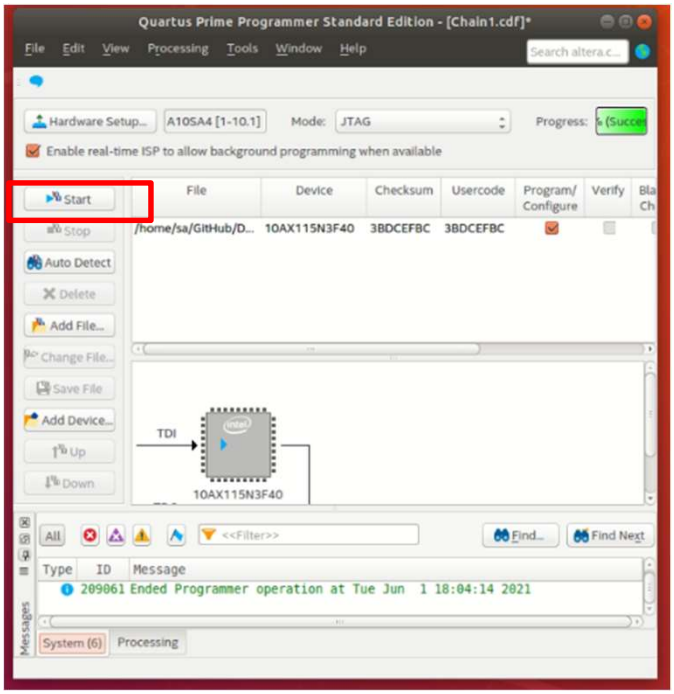
②



③



Step. 3
And then click ‘Start’ icon for upload sof file to FPGA development kit.



Step. 4
After upload finish, then reboot PC. This is the end of the FPGA Hardware setup.
After that build RayCore® MC API and run Example scenes.

$cd *<User Directory>*/Demos
$sh build.sh
$cd *<User Directory>*/Demos/bin
$./<Demo Scene>
(For Example : $./rc_car