E - ELEMENTS

HAPS-SX VU19P 1F Deep Learning Accelerator

Last Updates: 14th Sep 2020

E-Elements Technology Co., Ltd

Contents

1. Introduction

HAPS is a product, with the fastest performance, highest debug productivity and enterprise scalability to accelerate software development, system validation and verification.

Today, we will use HAPS-SX to demo Deep Learning Accelerator (DLA). There are two labs in this section. One is classification, and the other is object detection.

2. Equipment Requirements

Machine

- ☐ HAPS-SX
- ☐ USB reader
- ☐ SD card *2 (burn already)
- ☐ screen
- ☐ PC

Daughter board

- ☐ HAPS-SMF

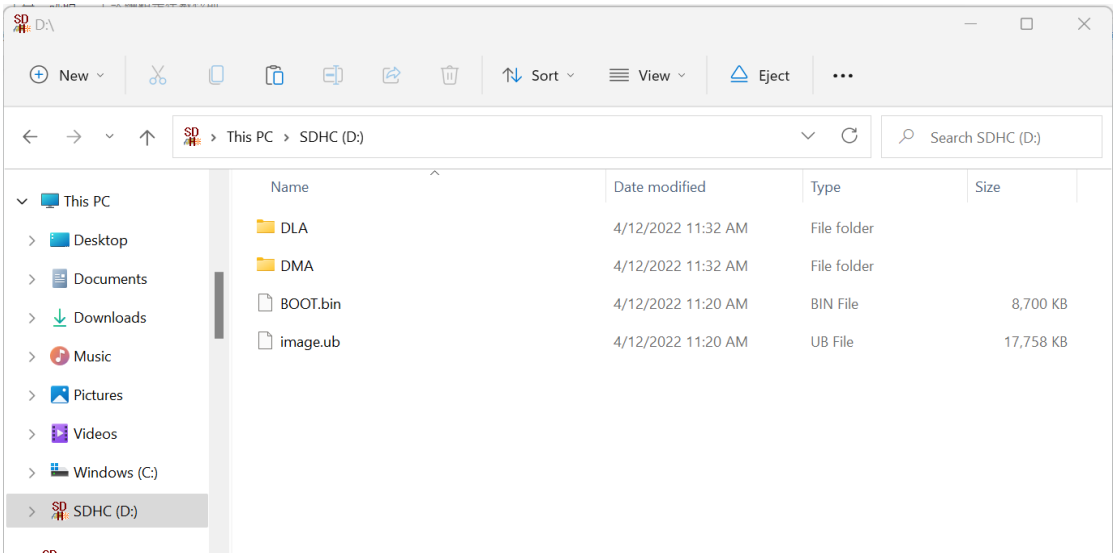
Cable

- ☐ HAPS-SX power cable
- ☐ FireFly loopback cable assembly *2
- ☐ mini DP to HDMI
- ☐ micro USB to USB
- ☐ SMF 4EV power supply

3. Quick start guide

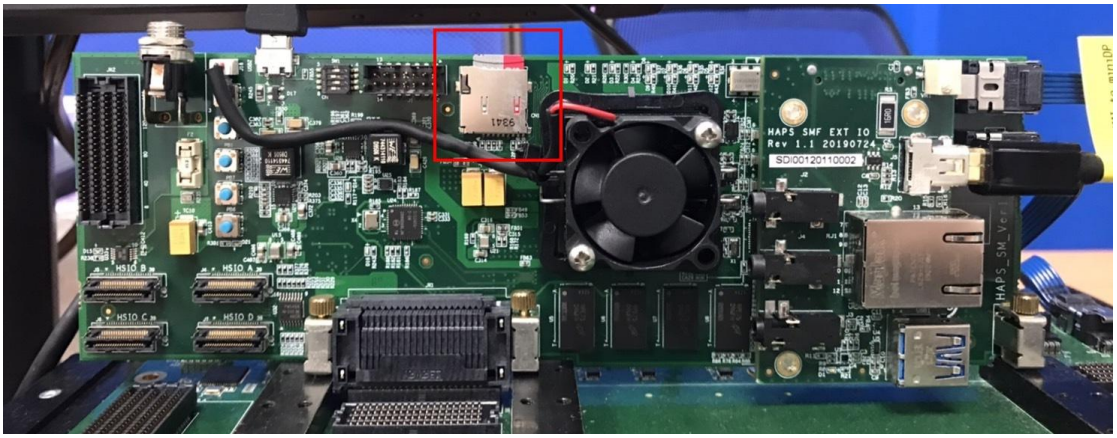
a. Check HAPS SMF SD card content

Copy content in the DLA folder to the root file.



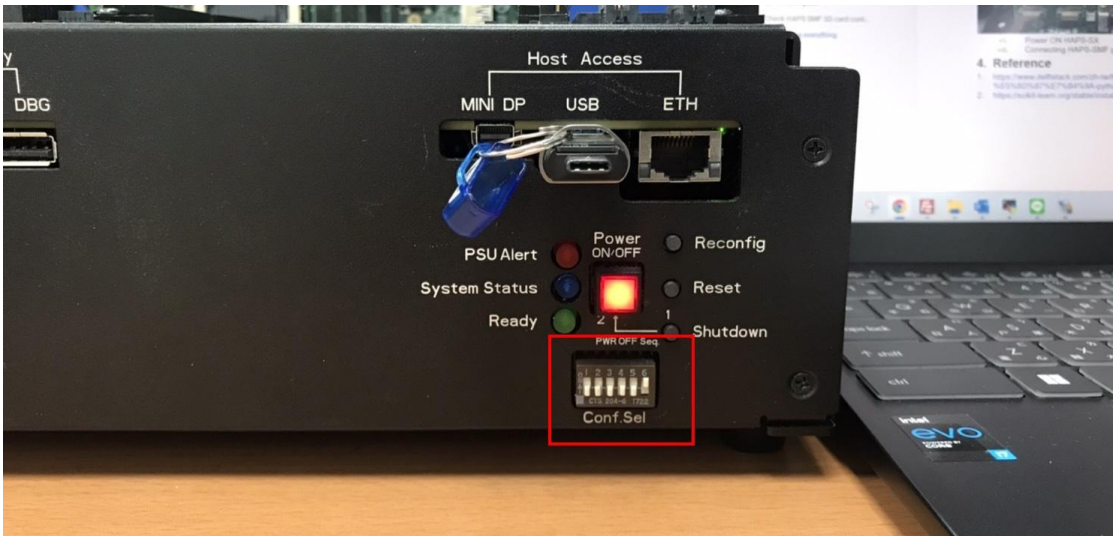
b. Connecting everything

i. Insert HAPS SMF SD card into JX12.

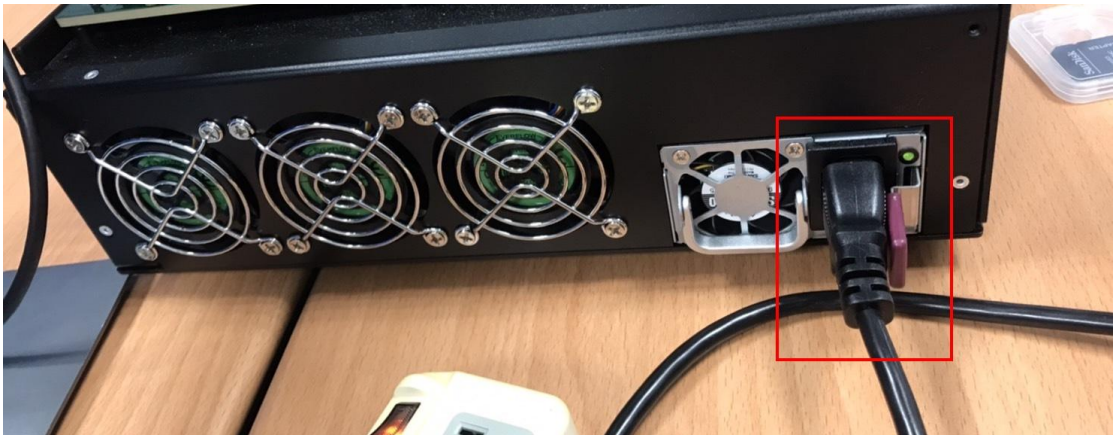


ii. Insert HAPS-SX Project by USB or USB reader.

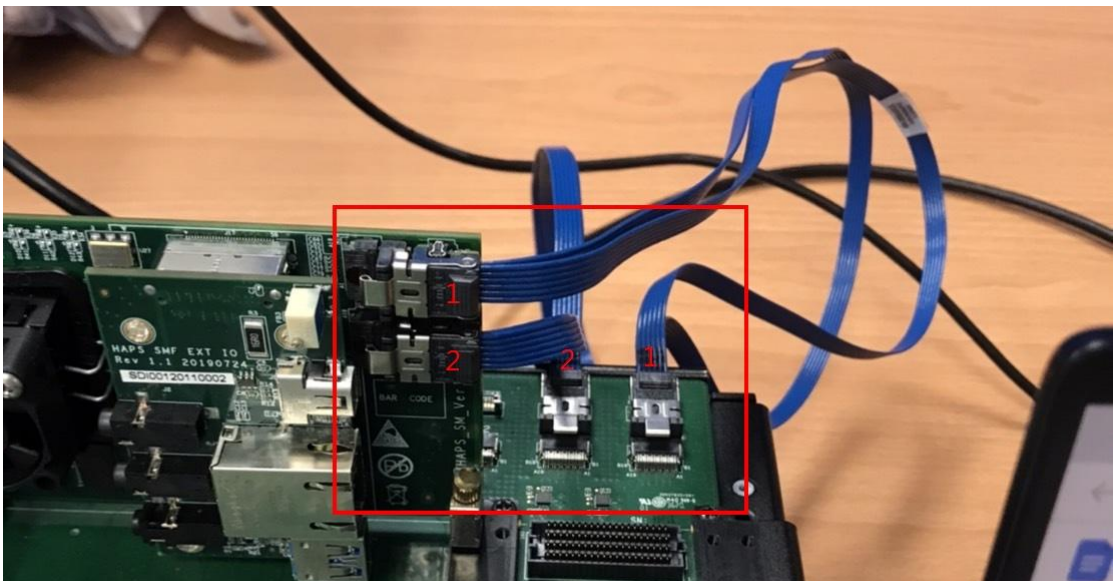
iii. Switch 000001



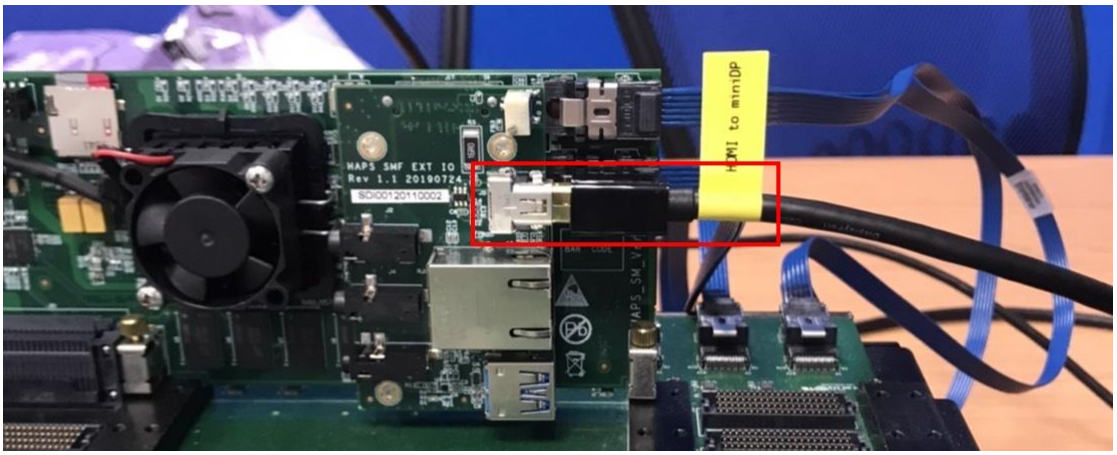
iv. Connecting HAPS-SX power cable.



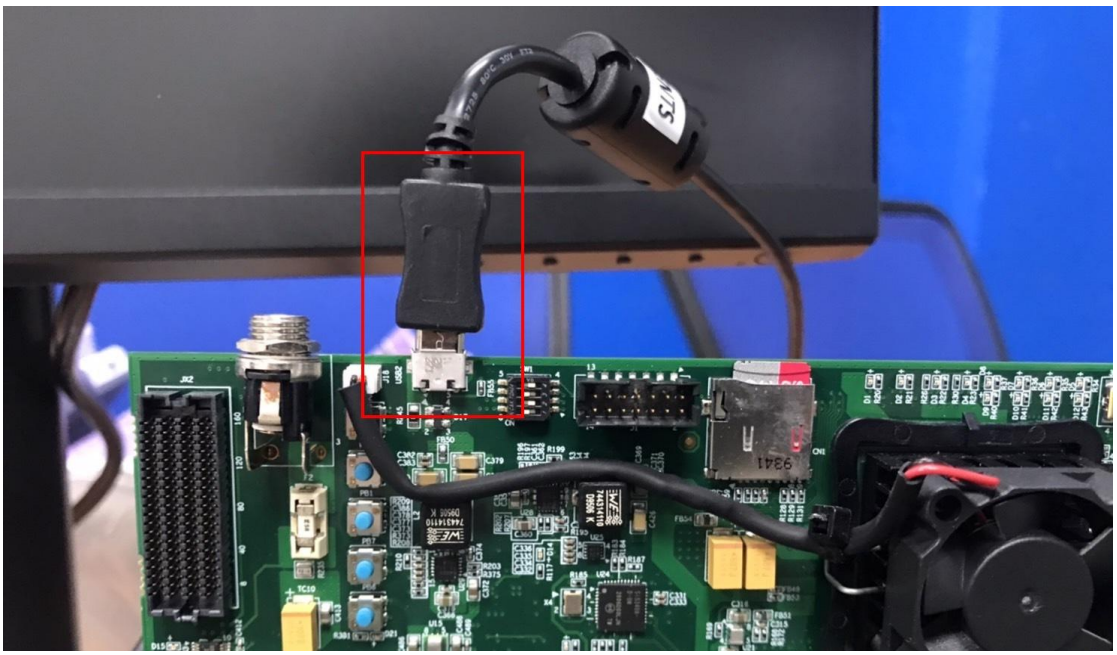
v. Connecting FireFly loopback cable assembly.



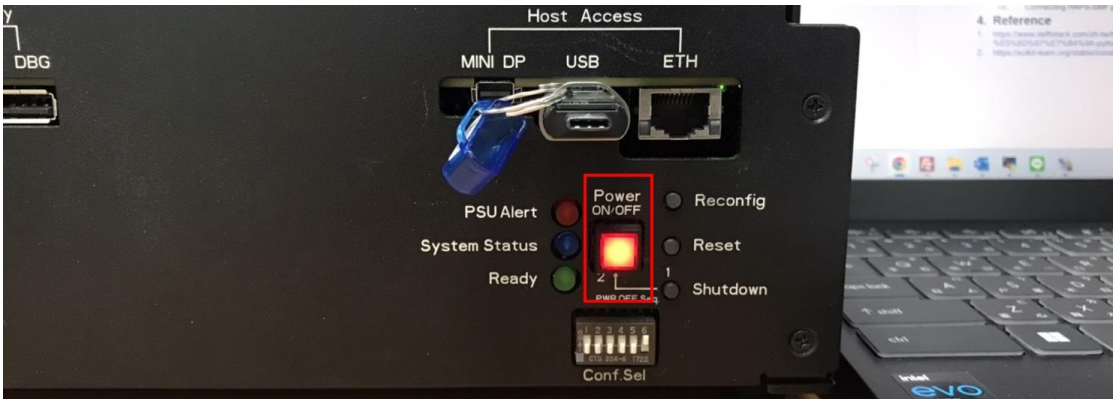
vi. Connecting mini DP to HDMI monitor.

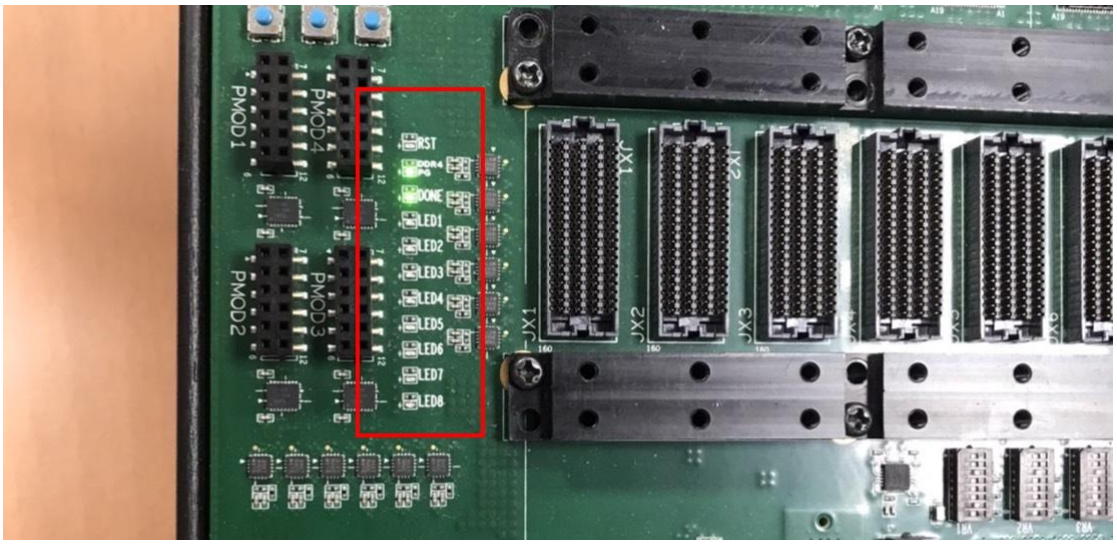


vii. Connecting Jtag to PC.

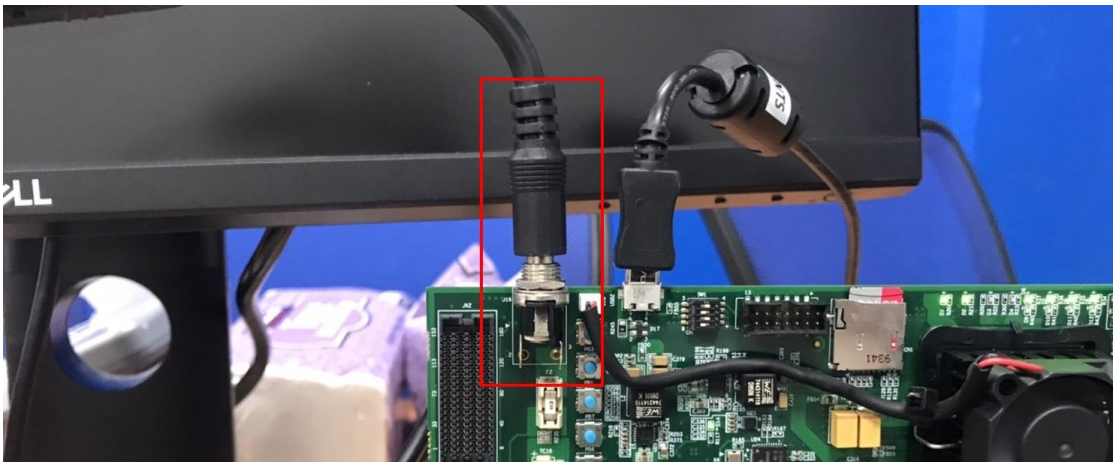


viii. Power ON HAPS-SX and check DONE light.

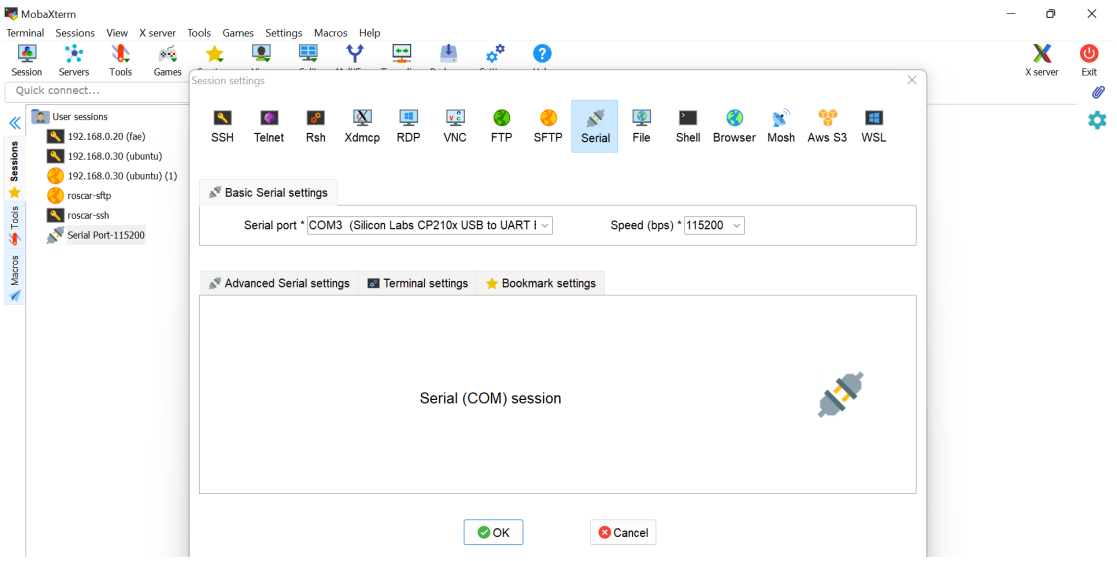




ix. Connecting HAPS-SMF power supply.



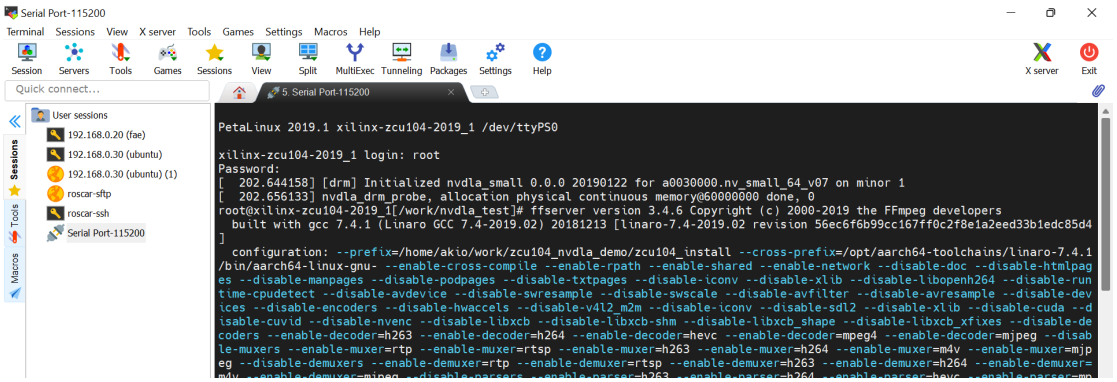
c. Open MobaXterm and connect to SMF



d. Log in

login: root

password: root



e. Select demo to run

i. ./classification.sh

ii. ./yolov1.sh