PLC2

Software User Guide (EN)
ADL-1000
Rev. 1.1.0

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Contents

01 Introduction

This Software User Guide is an extension to the ADL-1000 User Guide and explains the aspects of software installation, updating and accessing the device from own software applications.

Be sure to read the User Guide first.

01.1 References

The ADL-1000 product documentation as well as the ADL-1000 User Guide can be found on www.plc2.com.

02 Using the ADL-1000 Updater

This chapter describes how to update the ADL-1000 firmware using the provided update tool. It is possible to update the follwing components:

- **Golden Image** Update Golden Image for the Multiprocessor System on a Chip (MPSoC) over the 1G network interface (*ETH1/service*).
- **Main Image** Update Main Image for the MPSoC over the 1G network interface (*ETH1/service*) for fleet management to add features and patches.

02.1 Prepare Update Setup

In order to preapre the update setup update client file **update-client.tar.gz** is reqired, which will be provided beforehand. Follow the below mentioned steps to setup the update client.

- Copy the file update-client.tar.gz to the Linux host-PC.
- Execute command: **docker load < update-client.tar.gz**, which loads the docker image into your local Docker environment.
- Execute command: **docker image list**, that shows the docker images on the system. Note the image name for the update-client.
- Execute command: **docker tag <image_name> update-client**, to tag the image with the tag name **update-client**.

02.2 Update Main Image

A Main image with .BIN format is required to complete the Main image update process. Follow the below mentioned steps to update the Main image.

- Copy the provied main image to the main_image directory, inside update client.
- Open a terminal, change directory to the main_image.
- Execute the command to update Main image: **docker run -v $PWD:/work update-client <ADL_IP_ADDRESS> update-linux -f /work/BOOT.BIN**
- Execute the command to reboot ADL-1000: **docker run -v $PWD:/work update-client <ADL_IP_ADDRESS> reboot**
- Power cycle the the ADL with the power button.

02.3 Update Golden Image

A Golden image with .BIN format is required to complete the Golgen image update process. Follow the below mentioned steps to update the Golden image.

- Copy the provied Golden image to the golden_image directory, inside update client.
- Open a terminal, change directory to the golden_image.
- Execute the command to update Golgen image: **docker run -v $PWD:/work update-client <ADL_IP_ADDRESS> update-golden -f /work/BOOT.BIN**
- Execute the command to reboot ADL-1000: **docker run -v $PWD:/work update-client <ADL_IP_ADDRESS> reboot**
- Power cycle the the ADL with the power button.

03 Using a Star Cooperation FL3X Device with ADL-1000

This chapter describes the usage of a Star Cooperation FL3X Device and additional information required to use this device with an ADL-1000.

The FL3X Device is connected to the ADL-1000 over the 1G service network interface (ETH1). The ADL-1000 detects the FL3X Device with a fixed IP address set to 192.168.11.90. Therefore, before connecting the FL3X Device with the ADL-1000, the FL3X Device tooling must be used to change it's IP address.

04 Conversion tool for ADL-1000

This chapter describes how to use the data conversion tool for the ADL-1000. It is possible to convert the recorded data offline in a host computer into Measurement data format version 4 (MDF4).

For detailed instructions on the usage of the data-converter tool, please use the build-in help function of the tool itself.

The following steps are required to convert the recorded data.

- Remove the Solid-State Drives (SSDs) from the ADL-1000.
- Connect the SSDs to the host computer for conversion.
- Convert the ADL-1000 recording to MDF4 output using the data-converter.

Glossary

ADL Automotive Data Logger

MDF4 Measurement data format version 4

MPSoC Multiprocessor System on a Chip

SSD Solid-State Drive