IMAGE INSTALLATION GUIDE

ARTiGO A820

Linux EVK v3.2.1

1.00-10262016-161500

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Revision History

Version	Date	Remarks
1.00	10/26/2016	Initial release

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1. Introduction

This Image Installation Guide explains how to boot the Linux EVK system image on the ARTiGO A820 system in order to begin evaluating the platform.

The ARTiGO A820 Linux EVK v3.2.1 is developed based on the NXP fsl-yocto-3.14.28_1.0.0 (Yocto 1.7 Dizzy) and enables the hardware features of the ARTiGO A820 system.

1.1. Package Contents

The **via-image-gui-imx6qvab820.sdcard** is the SD card image containing a precompiled OpenEmbedded file system.

1.2. Version Information and Supported Features

- U-Boot version: 2014.04
- Kernel version: 3.14.28
- Evaluation image: OpenEmbedded-core built with Yocto 1.7 Dizzy
- Development based on NXP fsl-yocto-3.14.28_1.0.0 (Yocto 1.7 Dizzy)
- Supports SPI with eMMC or Micro SD boot (default)
- Supports HDMI display
- Supports HDMI audio output
- Supports COM 1 (RS-232/RS-485), Onboard COM as debug port
- Supports Gigabit Ethernet (LAN 1)
- Supports 10/100Mbps Ethernet (LAN 2)
- Supports VNT9271 USB Wi-Fi dongle
- Supports EMIO-1541 miniPCIe Wi-Fi module
- Supports EMIO-2531 miniPCIe Wi-Fi & BT module
  - Supports Bluetooth A2DP and SPP profile
- Supports EMIO-2550 miniPCIe Mobile Broadband module
- Supports Watchdog, GPIO and RTC

2. Image Development

This section explains the setup requirements for booting from a Micro SD card.

2.1. Booting from a Micro SD Card

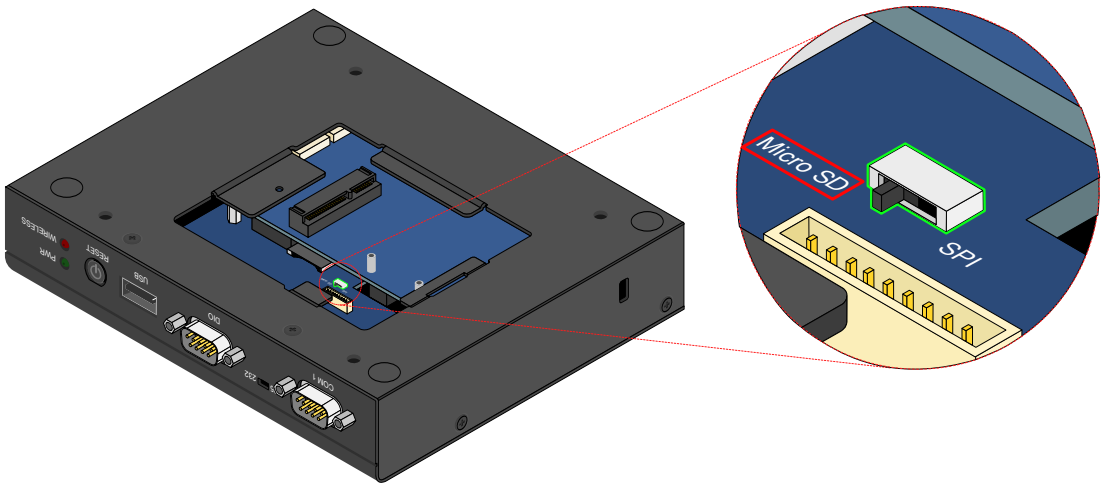
The **via-image-gui-imx6qvab820.sdcard** image allows the system to run entirely from the Micro SD card.

The first step is to copy this image onto a Micro SD card. Insert a Micro SD card into your Linux host machine and make sure it is not mounted. Copy the SD Card image onto the Micro SD card with the command below, replacing <device name> with the correct value for the card, for example "sdb".

Important: Make sure you are writing to the correct device or the host system environment could be damaged.

```
$ sudo dd if=via-image-gui-imx6qvab820.sdcard of=/dev/<device name> bs=1M conv=fsync
```

Next, set the switch SW2 to the Micro SD position as shown below.



Micro SD / SPI boot select switch diagram

Insert the prepared Micro SD card into the ARTiGO A820, connect an HDMI display, and power on the device to initiate the boot process.

When the boot process is completed, you will see the OpenEmbedded desktop.

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