CAM1
Quick Start Guide
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Quick Start

Please perform the following steps in order to activate the 96Boards CAMERA 1 Mezzanine:

**Equipment required:**
- 96Boards Avenger96 from Arrow
- Display with HDMI cable
- Keyboard + Mouse
- P.S to Avenger96 EVB board

**Test process:**

1. Burn the SD card with the image “av96_ap1302_noswap_200815.img”
   Use “Win32DiskImager” SW tool

2. Configure the boot switch on Avenger96 board
   By select the SD CARD option (1,0,1)
1.1.3 Key components

- Gigabit Ethernet
- Power Jack
- Reset Button
- Power Button
- JTAG
- Gigabit Ethernet
- Low Speed Expansion Connector
- High Speed Expansion Connector
- Battery connector CR1216, CR1230 or CR1225
- Power On LED
- Boot Switch
- 8 GB eMMC
- microSD
- HDMI
- USB 2.0 Micro AB
- USB 2.0 Host 2
- USB 2.0 Host 1
- WiFi and Bluetooth LEDs
- User LEDs
1.2.2 Boot Mode

The Avenger96 supports multiple boot options which are selected by the DIP-switch S3. To select a logical “1” a switch needs to be pushed to the right. Therefore a logical “0” is set by pushing the switch to the left. The numbering of these pins is printed next to the switch on the circuit board.

<table>
<thead>
<tr>
<th>BOOT Mode</th>
<th>Comments</th>
<th>Switch 1 - BOOT 2</th>
<th>Switch 2 - BOOT 1</th>
<th>Switch 3 - BOOT 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>UART and USB</td>
<td>USB high-speed Device</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NOR-Flash</td>
<td>On Quad SPI</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>eMMC</td>
<td>On SDMMC2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>NAND-Flash (Not available)</td>
<td>SLC NAND Flash</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Reserved (NoBoot)</td>
<td>Get boot access without boot from Flash memory</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SD-Card (Standard)</td>
<td>On SDMMC1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>UART and USB</td>
<td>USB OTG</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Serial NAND Flash (Not available)</td>
<td>NAND flash on Quad SPI</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

3. Connect the 96Boards CAMERA 1 Mezzanine

4. Connect the 12V power supply to Avenger96 board

5. Wait until you will see the main screen:
6. Double clock on Camera icon

7. Wait few seconds until you will get the camera view
8. Second option open camera is by sending the following commands via the Terminal

   cd /home/root
   ./v4l2_start.sh
The following screen will appear:
And after 10 seconds you will get the following screen:
Document Revision History

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<th>Date</th>
<th>Author</th>
<th>Status and Description</th>
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<td>Shmuel Asis</td>
<td>Initial version</td>
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<td>1.0</td>
<td>08/10/2020</td>
<td>Ori Makover</td>
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