LAB 4

1   Target:

Using video output and input on the embedded system.

2   Demonstration:

2.1   Show camera stream on the HDMI output. (10%)

2.2   Meet **Note 3.2 & 3.3** requirements. (20%)

2.3   Finish advance. (70%)

2.4   Upload your source code to E3.

3   Notes:

3.1   There are no instructions in this lab, you should be able to do this by modifying the work you have done and some instructions in some previous labs.

3.2   Your video output should be strictly centered. Make sure you use HDMI 1080p to show the full size of camera. (10%)

3.3   Explain how you align output to the center. (10%)

4   Hints:

4.1   You should follow the document "TQIMX6_uboot 菜单手册" to modify some bootup arguments.

4.2   Linux framebuffer is in sleep mode in default.

4.3   http://www.armadeus.org/wiki/index.php?title=Framebuffer

5   Advance:

5.1   Make your board an electronic scroll board. Your board should automatically start to show the picture we provided on the HDMI output after bootup. (50%)

-   It works. (20%)

-   Performance. (30%)

5.2   You can control the electronic scroll board to move left or right by pressing "J" and "L" (without "enter"). (20%)