

## LAB 4

### 1 Target:

Using video output and input on the embedded system.

### 2 Demonstration:

2.1 Show camera stream on the HDMI output.

2.2 Explain your code to TAs.

2.3 Upload your source code to New E3.

2.4 Last date to demo: **Dec. 9<sup>th</sup>, 2021**.

### 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.

### 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 Bonus:

5.1 Make your board an electronic scroll board. Your board should automatically start to show some pictures on the HDMI output after bootup. You should prepare pictures by yourself. The picture format is not restricted.