

## Subject Name: EOS / Embedded Linux

Note : if you have specific doubts, after reading the required documents and references, you can write to babu\_krishnamurthy@yahoo.com

### Lab-Assessment 1:

1. First, as mentioned, in assignment1\_userleds.txt, test the user leds on the board, as per the SRM and the assignment1\_userleds.txt files - also, refer to lecture and lab notes, for more details – test the standard features of the user-leds, by manipulating their trigger attribute - for instance, setting the trigger to none, they can control the led, as per their requirement – commands are mentioned, in the above txt file - there are other \*.txt files provided, for more details – follow the lecture notes

2. next, based on assignment1\_userleds.txt and assignment2\_userleds.txt, disable the led0|led1|led2 on-board, from the current parent node and add them to a new, parent node, as mentioned, in the \*.txt and lectures - in addition, modify the new, parent node to manage led0|led1|led2 - rebuild the dtb , reload the kernel and the dtb – test and verify the changes , as mentioned, in the above \*.txt documents – also, you use the led\_ctrl.c, for writing a custom driver – this custom driver must be modified, as per requirements of led0|led1|led2 – follow the led\_ctrl.c and lecture/lab notes

3. next, based on assignment1\_userleds.txt and assignment2\_userleds.txt, add a new, parent node, as mentioned, in the \*.txt and lectures - in addition, modify the new, parent node to manage ext led0 |ext led1 | ext led2 - rebuild the dtb , reload the kernel and the dtb – test and verify the changes , as mentioned, in the above \*.txt documents – also, you use the led\_ctrl.c, for writing a custom driver – this custom driver must be modified, as per requirements of ext led0|ext led1|ext led2 – follow the led\_ctrl.c and lecture/lab notes – in this case, you also need to modify the pin control children nodes, for gpios of external leds – follow the above documentation | lecture notes | lab notes