Potentiometer -- Task

**FUNCTION POTENTIOMETER\_Task {**

**<Initialize queue>**

**<Enable Port D>**

**<Set PortD to output pin>**

**<Set drive strength to 4ma>**

**<Set to High>**

**<Enable ADC0 Peripheral>**

**<Configure trigger>**

**<Configure step 0 to be final step>**

**<Enable ADC sequence 0>**

**<Clear ADC sequence interrupt flag>**

**WHILE (TRUE) {**

**<Execute POTENTIOMETER>**

**}**

**<Trigger Sample>**

**<Wait for interrupt to be thrown>**

**<Collect Data>**

**<Reset interrupt >**

**<Write sampled data to queue>**

**<Set delay time>**

**}**

OLED -- Task

**FUNCTION OLED\_Task {**

**<Initialize variables>**

**WHILE (TRUE) {**

**<Draw to screen name and tick count>**

**<Draw values to screen>**

**<Advance next Execution Time>**

**}**

**}**

CAPACITOR -- Task

**FUNCTION CAPACITOR\_Task {**

**<Initialize variables>**

**<Enable PortD>**

**<Set to Output>**

**<Initialize ADC>**

**<Enable ADC>**

**WHILE (TRUE) {**

**<Trigger From Processor>**

**<Clear ADC>**

**<Enable ADC to 0>**

**<Set next execution time>**

**}**

**}**

UART -- Task

**FUNCTION UART\_Task {**

**<Initialize variables>**

**<Enable PortA>**

**<Enable UART 0>**

**<Initialize UART0>**

**WHILE (TRUE) {**

**<Send Data>**

**<Print Data>**

**<Set next execution time>**

**}**

**}**