**Pseudo Code for LEDService**

**InitLEDService**

*Takes 8-bit variable “Priority,” returns boolean true or false.*

Pass input parameter to static variable “MyPriority”

Call InitLEDStrip function to initialize LED strip hardware

Return true

End

**PostLEDService**

*Takes ES\_Event “ThisEvent,” returns boolean true or false.*

Return ES\_PostToService with params “MyPriority” and input param “ThisEvent”

End

**RunLEDService**

*Takes ES\_Event “ThisEvent,” returns ES\_Event.*

Set ReturnEvent to ES\_NO\_EVENT

If input event is ES\_Celebrate

Start 150 ms celebration timer

Else if input event is a celebration timer timeout

If counter is less than 5

Set all LEDs low

Set certain LEDs high to produce the color in ColorArray corresponding to current counter value

Start 150 ms celeb timer

Increment counter by 1

Else if counter is greater than or equal to 5

Set all LEDs low

Set certain LEDs high to produce the color in ColorArray corresponding to current counter value

Start 50 ms celeb timer

Reset counter to 0

Else if input event is ES\_StopCelebrate

Stop celeb timer

Endif

Endif

Return ReturnEvent

End

**InitLEDStrip**

*Takes nothing, returns nothing.*

Enable clock to port E

Enable clock to port B

Kill a few clock cycles

Enable E2, E3, and B2 for GPIO

Set E2, E3, and B2 to be digital outputs

Set E2, E3, and B2 all low (turn off all LEDs)

End

**SetLEDHigh**

*Takes 8 bit “Color,” returns nothing.*

If Color is AllColors

Set all LEDs high

Else if Color is Red

Set Red LED high

Else if Color is Green

Set Green LED high

Else if Color is Blue

Set Blue LED high

Else if Color is Teal

Set Blue and Green LEDs high

Else if Color is purple

Set Blue and Red LEDs high

Else if color is orange

Set Red and Green LEDs high

Endif

End

**SetLEDLow**

*Takes 8-bit “Color,” returns nothing.*

If Color is AllColors

Set all LEDs low

Else

If Color is Red

Set Red LED low

Else if Color is green

Set Green LED low

Else if Color is blue

Set Blue LED low

Endif

Endif

End

**SetRedLED**

*Takes nothing, returns nothing.*

Calls SetLEDLow with param AllColors

Calls SetLEDHigh with param Red

End

**SetBlueLED**

*Takes nothing, returns nothing.*

Calls SetLEDLow with param AllColors

Calls SetLEDHigh with param Blue

End