

Code Examples for Athena Class Microcontrollers

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pot command

To take advantage of this function for other than recommended RC values (0 to 255 reading) you need to find the best scale. Here is a small program to do just that

```
dim max
dim pot_data
dim index
dim max_index

max=0
for index=0 to 255 step 1
  pot 0,index,pot_data
  if pot_data>max then
    gosub new_max
  endif
next
print max_index," : ",max
end

new_max:
  max=pot_data
  max_index=index
return
```

TW523 command example

Simple 37 byte code example on how to create a serial to X10 interface with a TW523.

```
'TW523 to serial interface
'Connect TW523 to ports 4 and 5 and you want need pullup resistors
'Will send out any house,keycodes recieved
'will also wait for 2 bytes and then transmuted house and keycodes.
```

```
dim TW523house,TW523keycode
dim cmdidx,data1,data2,data3
```

```
regbitreset OPTION,7 'Turn on pullups for ports 2,3,4,5,6,7
```

```
loop:
```

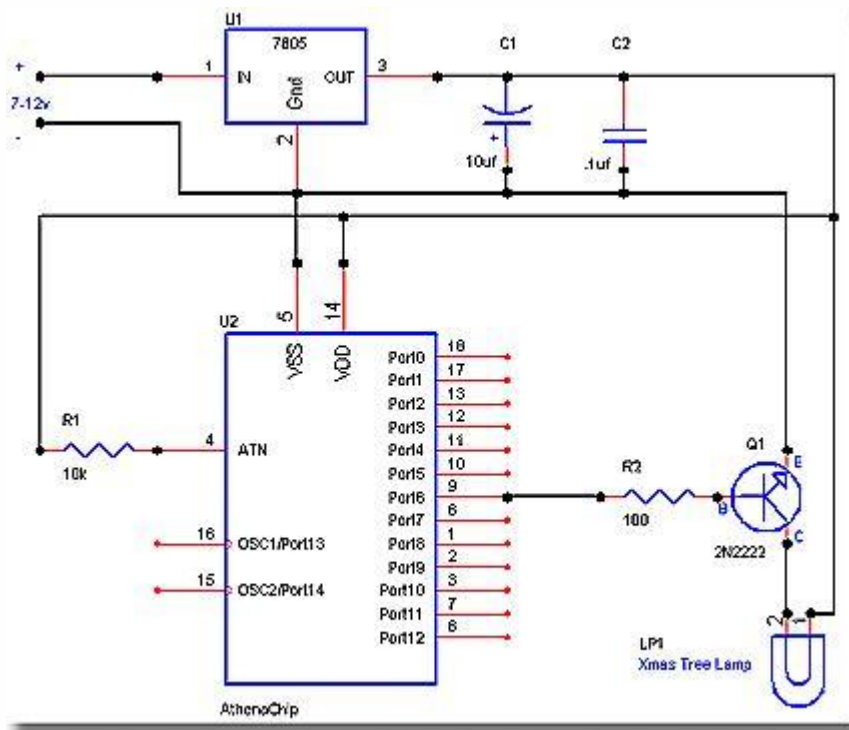
```
TW523read chkser,4,5,TW523house,TW523keycode
cptxmt TW523house
cptxmt TW523keycode
```

```
chkser:
```

```
getpacket loop,cmdidx,data1,data2
TW523write 4,6,data1,data2
goto loop
```

Emergency Rotating Light Simulator

This example uses a small X-Mass tree light and simulates a rotating emergency light



```
'Emergency Light
'Connect pin 6 to base of 2N2222 transistor
'Connect Emitter on transsistor to Vss
'Connect single Christmass light to Vdd and Collector of transistor
```

```
dim x
```

```
dim speed
```

```
hwpwm 1,255,1  
output 6
```

```
speed = 250
```

```
loop:
```

```
  for x = 20 to 190 step 1  
    hwpwm 1,255,x  
    pauseus speed  
  next
```

```
  for x = 190 to 20 step -1  
    hwpwm 1,255,x  
    pauseus speed  
  next
```

```
hwpwm 1,255,0
```

```
for x = 20 to 190  
  pauseus speed  
next
```

```
goto loop
```