Pavlok Hardware Test – Rev 3

August 28th, 2017

1. Flash the Test hex file onto the NRF52 using nRFgo Studio. (Do not flash a soft device or bootloader.)
2. Upon startup, the RED, GREEN, P0.16, P0.17, P0.18, P0.19, and P0.20 LEDs will illuminate.
3. The following are tested:

* PWM – Piezo & Vibrator motor are turned on simultaneously for 2 seconds
* Accelerometer – WHOAMI register is queried
* Gyroscope – WHOAMI register is queried
* RTC – RAM byte is written and verified, RTC clock is run for 1 second and time is verified
* Flash – First sector is erased, written, verified, and erased
* The status of P0.25 is reflected on P0.20 as on/off

1. If the Accelerometer, Gyroscope, RTC, and Flash tests are successful, only the GREEN LED will be left illuminated, the RED LED will be off.
2. As the Accelerometer, Gyroscope, RTC, and Flash tests pass, the corresponding YELLOW LED will turn off as follows:

* Accelerometer – P0.16
* Gyroscope – P0.17
* RTC – P0.18
* Flash – P0.19

(Keep in mind that the LED (P0.20) for displaying the status on P0.25 will either be on or off; this is not indicating a failure but only a state.)