

Pavlok Hardware Test – Rev 3  
August 28<sup>th</sup>, 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
- 4) If the Accelerometer, Gyroscope, RTC, and Flash tests are successful, only the GREEN LED will be left illuminated, the RED LED will be off.
- 5) 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.)