



February 22, 2019

Subject: FCC 15.209, 15.249 Class 2 PERMISSIVE CHANGE for Clean Hands Safe Hands, Model CHSH badge, FCC ID: 2AHQD-BADGE

The purpose of this report is to file for a Class II permissive change for the following reasons:

The form factor and core functionality remain the same as the previously certified design, but with a few performance improvements and some extended functionality.

1. P1 has gone from 4-pin interface to a 6-pin interface, allowing simple access to 2 GPIO pins on U1 (U1-22, U1-11).
2. The GPIO from U1-10 has been brought out to a pad.
3. Adjusted values for C1/C2 from 12pF up to 15pF to correctly tune the X1 clock.
4. New PCB antenna pattern (IFA vs previous PCB whip).

No other hardware changes have been made to the original product. No changes to the transmitter circuitry of the radio, the changes described in this filing result in the same RF characteristics as in the original filing and the other original test results continue to be representative of and applicable to the equipment.

There is no increase in the output power; no RF Exposure condition changed; the device remains the same equipment class and there are no other changes to the device that indicate a need for a new FCC ID.

The test report shows that the product continues to meet the applicable subpart for CFR 47, Part 15.207, 15.209, and 15.249.

See the test report and additional submittal exhibits for details.

Best Regards,

A handwritten signature in black ink that reads "Sandi McEnery".

Sandi McEnery
Agent for Clean Hands Safe Hands