

July 18, 2024

Innovation, Science, and Economic Development Canada (ISED) 3701 Carling Ave., Bldg. 94, Ottawa, ON, K2H 8S2 Canada

Federal Communications Commission Authorization and Evaluation Division 7435 Oakland Mills Rd. Columbia, MD 21046

Dear Sir or Madam:

We, Aclara Technologies, LLC. requests a Class II permissive change certified under the same FCC ID: Reference FCC ID: LLBY84034-1 & IC: 6571A-Y840341.

We, Aclara Technologies, LLC. hereby declare that this version of the model Y84034-1 is electrically identical with the same electromagnetic emissions and electromagnetic compatibility characteristics as model, except for firmware, as the Originally certified product. We attest that the equipment is electrically identical. The new version uses the same printed circuit board assemblies and electronics. The clocks, tuning circuits, antennas, RF power remained unchanged.

The original protocol uses ALOHA with carrier detection to avoid collisions on a chosen, licensed channel. The network interface card (NIC) chooses a random channel from its list of licensed channels to transmit its message. After a channel is selected, a random wait time is chosen. After the wait time, the selected channel is monitored for a carrier. If no carrier is detected, the NIC immediately transmits its message on the chosen channel. If a carrier is detected, the NIC aborts for another random wait period and tries again.

**The only changes are in software.** The data rate was increased from 9600 to 10000. Also changed is is how the channels are used. The old version was random access aloha, the new version is a TDMA, so everything is slotted on all channels. The Deviation was Changed from 1000Hz to 800Hz.

The new protocol uses TDMA with carrier detection to avoid collisions on the assigned, licensed channel. The network interface card (NIC) is assigned a licensed channel and a time slot to transmit its message. At the beginning of its assigned time slot, the NIC monitors for a carrier on its assigned channel. If no carrier is detected, the NIC immediately transmits its message on its assigned channel. If a carrier is detected, the NIC aborts until its next assigned time slot and tries again.

The purpose of this application is to add a new Emissions Designator of F7D.

Please contact me should there be need for any additional clarification or information.







Best Regards, Authorized Signature

Joseph Strzelecki Senior EMC Engineer

Radiometrics Midwest Corporation

boseph Strzelecki

Authorized Agent for Aclara Technologies, LLC.