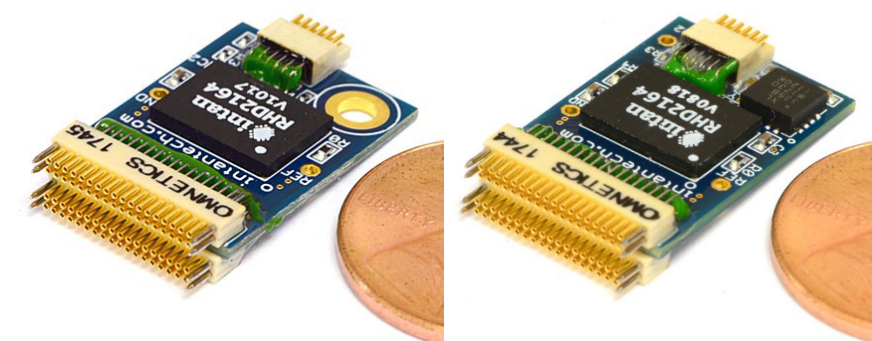
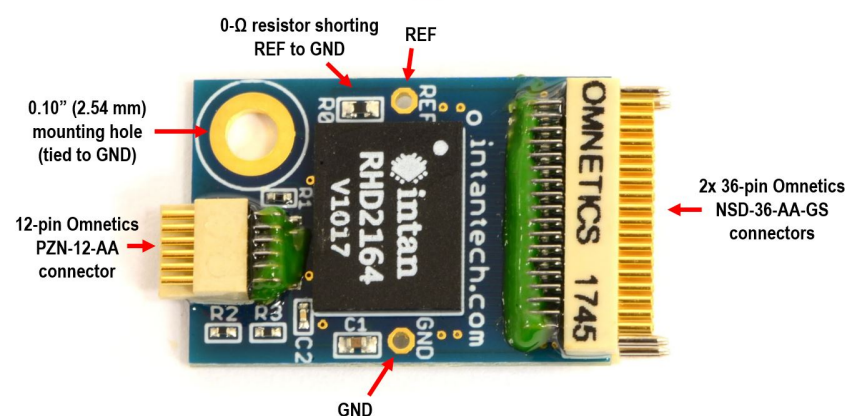


## RHD 64-Channel Headstage

The RHD 64-channel headstage is shown in the Figures 15-17 below.

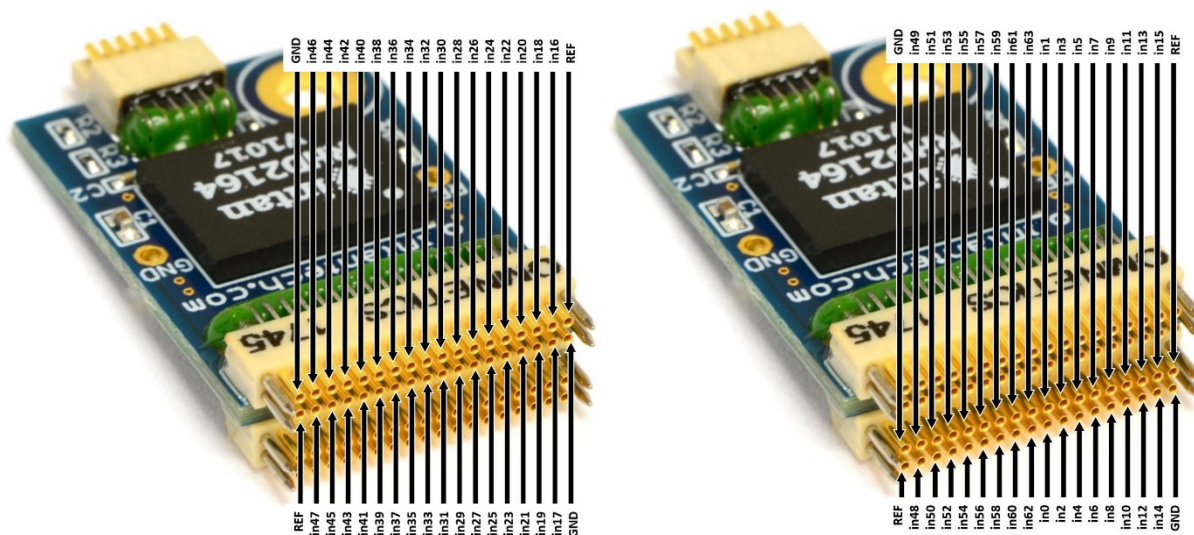


**Figure 15.** RHD 64-channel headstage (left, 21 × 14 mm, 1.30 g) and RHD 64-channel headstage with 3-axis accelerometer (right, 22 × 14 mm, 1.38 g).



**Figure 16.** RHD 64-channel headstage with connection ports labeled. The 0-Ω resistor may be removed to disconnect the reference electrode from ground.

A 0.10" (2.54 mm) mounting hole is provided for optional mechanical attachment.



**Figure 17.** Electrode connector pin diagram for RHD 64-channel headstage. This geometry matches the NeuroNexus H64LP electrode connector. The four REF pins are connected on the board, so only one pin needs to be connected to the reference electrode. The GND pins are also connected on the board.

Figure 17 shows pin diagrams for the electrode connectors on the RHD 64-channel headstages. Amplifier inputs 0-63 should be connected to recording electrodes. One of the REF pins should be connected to a low-impedance reference electrode (typically a de-insulated electrode or a platinum wire). One of the GND pins should be connected to tissue ground (typically a skull screw in the case of chronic recordings, or a low-impedance electrode located away from active muscles in the case of EMG recordings).