



The **DC In** is an accessory daughterboard for the QICK system that mounts directly onto the QICK RF 216 Main Board, providing two input channels to support DC signal acquisition in quantum control applications. In a typical setup, the DC In board is connected to the RF Main Board and installed within a QICK enclosure, with its SMA output connectors connected to the enclosure's front panel SMA ports using the included coaxial cables.



The DC In board includes a TI LMH5401 that converts the ground-referenced input signal to a differential signal, and a TI LMH6401 variable-gain amplifier capable of providing 32 dB of gain, from -6 dB to 26 dB in 1 dB steps. The LNH6401 is controlled through a software interface provided with the QICK system, making it easy to acquire low-frequency, ground-centered analog signals between -2.5V and 2.5V.

