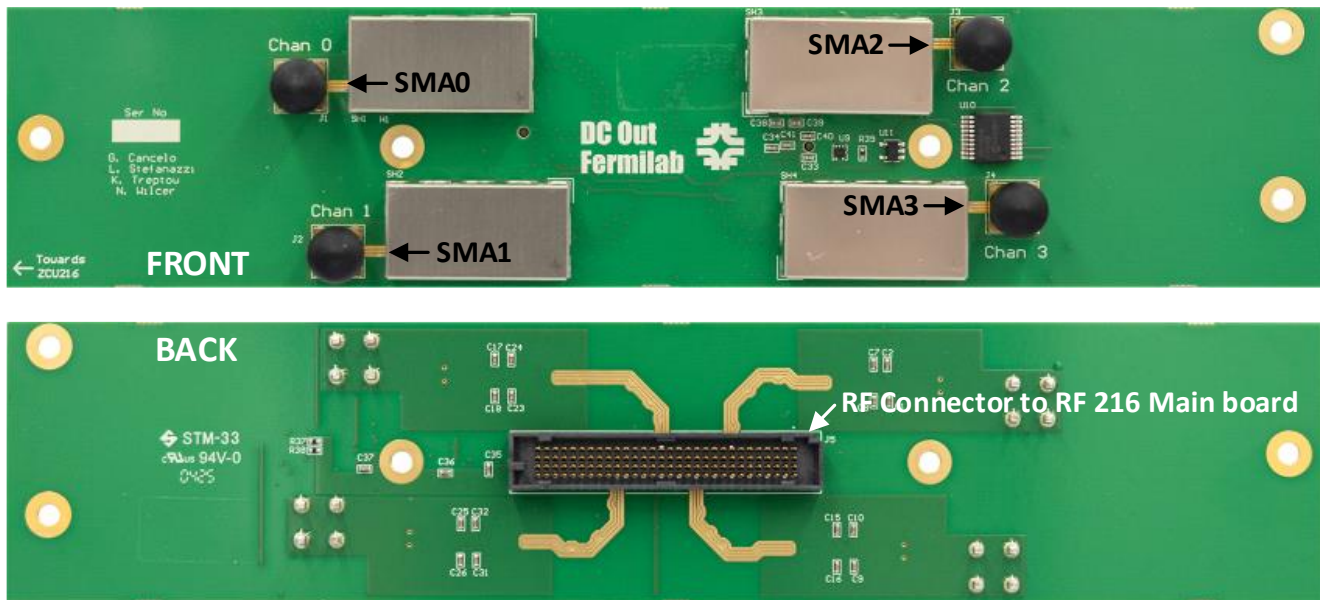


The **DC Out** is an accessory daughterboard for the QICK system that mounts directly onto the QICK RF 216 Main Board, providing four output channels to support DC signal generation in quantum control applications. In a typical setup, the DC Out board is connected to the RF Main Board and installed within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



The DC Out board features a Texas Instruments LMH5401 differential amplifier, which converts the differential output signals from the ZCU216 board into a single-ended signal. It also includes a Mini-Circuits LFCN-900D+ low-pass filter to suppress high-frequency components. This configuration enables the generation of low-frequency, ground-referenced analog signals within a  $\pm 2.5V$  range, making it well-suited for DC or baseband signal applications in quantum control systems.

