$$|c\rangle \longrightarrow |c\rangle$$

$$|a_0, ..., a_{m-1}\rangle \longrightarrow |a_0, ..., a_{m-1}\rangle$$

$$|b_0, ..., b_{n-1}\rangle \longrightarrow |(ca+b)_1, ..., (ca+b)_n\rangle$$

$$|0\rangle^{\otimes (n+1)} |w\rangle \longrightarrow |(ca+b)_0\rangle |0\rangle^{\otimes n} |w\rangle$$