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

$$|a_0, ..., a_n\rangle \longrightarrow |a_0, ..., a_n\rangle$$

$$|b_0, ..., b_n\rangle \longrightarrow |(ca + b)_1, ..., (ca + b)_{n+1}\rangle$$

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