$$\begin{array}{c|c} |C_{i-1}\rangle & - & - & - \\ |a\rangle & - & - & - \\ |b\rangle & - & - & a \\ |0\rangle & - & - & |a \oplus b\rangle \\ - & |(ab \oplus C_i) \oplus ((a \oplus b)C_{i-1})\rangle \end{array}$$