

$$\begin{array}{c}
(x_1 \otimes x_0) \otimes x_1 \\
\downarrow \rho_{x_1} \otimes 1_{x_1} \\
x_1 \otimes x_1
\end{array}$$

$$\begin{array}{c}
x_1 \otimes (x_1 \otimes x_1) \\
\downarrow 1_{x_1} \otimes \rho_{x_1 \otimes x_1}^{-1} \\
x_1 \otimes ((x_1 \otimes x_1) \otimes x_0)
\end{array}$$