

$$\begin{array}{ccc}
 {}^n\mathbb{C}_n^{\mathbb{U}} & \xrightarrow[\text{on}]{\times} & \mathbb{U} \Big|_O {}^n\mathbb{R}_n^{\mathfrak{D}} \\
 \uparrow \text{exp} & & \uparrow \text{exp} \\
 {}^n\mathbb{C}_n^{\mathbb{V}} & \xrightarrow[\text{on}]{q} & \mathbb{U} \Big|_O {}^n\mathbb{R}_n^{\mathfrak{D}}
 \end{array}$$

$$\sqrt{\times} \frac{\begin{array}{c|c} \mathbb{I} & \sqrt{\mathbb{I}} \\ \hline -\sqrt{\mathbb{I}} & \mathbb{I} \end{array}}{\quad} = \sqrt{\times} \frac{\begin{array}{c|c} \mathbb{I} & \sqrt{\mathbb{I}} \\ \hline -\sqrt{\mathbb{I}} & \mathbb{I} \end{array}}{\quad}$$

$$\mathfrak{D} = \mathbb{U}^{*-\text{inv}} / {}^n\mathbb{C}_n^{\mathbb{U}} \subset {}^{2n}\mathbb{R}_{2n}^{\Omega}$$