$$\begin{array}{ccc} & & \mathrm{Gal}(\overline{K}/K) \\ & \overset{\widetilde{\psi}}{\swarrow} & \downarrow \psi \\ \mathbb{U}_4(\mathbb{F}_2) \times_{\mathbb{F}_2^3} \overline{\mathbb{U}_4(\mathbb{F}_2)} & \xrightarrow{\pi_2} & \overline{\mathbb{U}_4(\mathbb{F}_2)} \end{array}$$

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