$$\begin{cases} {}^{n}_{2}\mathbb{K}^{\mathsf{U}}_{n} \\ {}^{n}_{1:1}\mathbb{K}^{\mathsf{U}}_{n} \end{cases} = \begin{cases} \mathsf{J} \in {}^{n}_{2}\mathbb{K}^{\mathsf{C}}_{n} \quad \mathsf{J} \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \overset{*}{\mathsf{J}} = \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \\ \mathsf{J} \in {}^{n}_{2}\mathbb{K}^{\mathsf{C}}_{n} \quad \mathsf{J} \begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array} \overset{*}{\mathsf{J}} = \begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array} \end{cases}$$

$$\begin{cases} {}^{n}_{2}\mathbb{R}^{\mathsf{U}}_{n} = {}^{n}_{2}\mathbb{R}^{\mathsf{C}}_{n} \cap {}^{n}_{2}\mathbb{C}^{\mathsf{U}}_{n} \\ {}^{n}_{2}\mathbb{C}^{\mathsf{U}}_{n} = {}^{n}_{2}\mathbb{C}^{\mathsf{C}}_{n} \cap {}^{n}_{2}\mathbb{H}^{\mathsf{U}}_{n} \end{cases} \xrightarrow[\begin{array}{c|c} i & 0 \\ \hline 0 & i \end{array}]{\begin{array}{c|c} \mathbb{1} & 0 \\ \hline 0 & \mathbb{1} \end{array}} \begin{cases} {}^{n}_{2}\mathbb{C}^{\mathsf{U}}_{n} \\ {}^{n}_{2}\mathbb{H}^{\mathsf{U}}_{n} \end{cases}$$

$$\begin{cases} {}^{n}_{1:1}\mathbb{R}^{\mathsf{U}}_{n} = {}^{n}_{2}\mathbb{R}^{\mathsf{C}}_{n} \cap {}^{n}_{1:1}\mathbb{C}^{\mathsf{U}}_{n} \\ {}^{n}_{1:1}\mathbb{C}^{\mathsf{U}}_{n} = {}^{n}_{2}\mathbb{C}^{\mathsf{C}}_{n} \cap {}^{n}_{1:1}\mathbb{H}^{\mathsf{U}}_{n} \end{cases} \xrightarrow[\begin{array}{c|c} i & 0 \\ \hline 0 & i \end{array}]{\begin{array}{c|c} \mathbb{1} & 0 \\ \hline 0 & \mathbb{1} \end{array}} \begin{cases} {}^{n}_{1:1}\mathbb{C}^{\mathsf{U}}_{n} \\ {}^{n}_{1:1}\mathbb{H}^{\mathsf{U}}_{n} \end{cases}$$

$${}^{n}_{\mathbb{R}}\mathbb{C}^{\mathsf{U}}_{n} = {}^{n}_{2}\mathbb{R}^{\mathsf{C}}_{n} \cap {}^{n}_{\mathbb{C}}\mathbb{H}^{\mathsf{U}}_{n} \xrightarrow{\begin{array}{c|c} \mathbb{1} & 0 \\ \hline 0 & \mathbb{1} \end{array}} {}^{n}_{\mathbb{C}}\mathbb{H}^{\mathsf{U}}_{n}$$

$$\begin{Bmatrix} {}^{n}\underset{\mathbb{R}}{\mathbb{C}}{}^{\mathsf{U}}_{n} \\ {}^{n}\underset{\mathbb{C}}{\mathbb{H}}{}^{\mathsf{U}}_{n} \end{Bmatrix} \xrightarrow[\begin{array}{c|c} 0 & \text{ɨ} \\ \hline -\text{ɨ} & 0 \end{array}]{\begin{array}{c|c} 0 & 1 \\ \hline -1 & 0 \end{array}} \begin{Bmatrix} {}^{n}_{2}\mathbb{R}^{\mathsf{U}}_{n} \\ {}^{n}_{2}\mathbb{C}^{\mathsf{U}}_{n} \end{Bmatrix}$$

$$\text{ʃ} \in {}^{n}\mathbb{C}^{\mathsf{U}}_{n} \Rightarrow \text{ʃ}\,\overset{*}{\text{ʃ}} = 1 \underset{*\mathrm{hom}}{\Rightarrow} \underset{\mathbb{R}}{\text{ʃ}}\,\underset{\mathbb{R}}{\overset{*}{\text{ʃ}}} = \underset{\mathbb{R}}{1} = \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array}$$

$$\text{ʃ} \in {}^{n}\mathbb{H}^{\mathsf{U}}_{n} \Rightarrow \text{ʃ}\,\overset{*}{\text{ʃ}} = 1 \underset{*\mathrm{hom}}{\Rightarrow} \underset{\mathbb{C}}{\text{ʃ}}\,\underset{\mathbb{C}}{\overset{*}{\text{ʃ}}} = \underset{\mathbb{C}}{1} = \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array}$$

$${}^{n}\underset{2}{\mathbb{R}}{}^{\mathsf{U}}_{n} \xrightarrow{\begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array}} {}^{n}\underset{\mathbb{R}}{\mathbb{C}}{}^{\mathsf{U}}_{n}$$

$${}^{n}_{=}\mathbb{R}^{\mathsf{U}}_{n} = {}^{n}_{=}\mathbb{R}^{\mathsf{C}}_{n} \cap {}^{n}\underset{\mathbb{R}}{\mathbb{C}}{}^{\mathsf{U}}_{n} \xrightarrow{\begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array}} {}^{n}\underset{\mathbb{R}}{\mathbb{C}}{}^{\mathsf{U}}_{n}$$

$${}^{n}_{=}\mathbb{C}^{\mathsf{U}}_{n} = {}^{n}_{=}\mathbb{C}^{\mathsf{C}}_{n} \cap {}^{n}\underset{\mathbb{C}}{\mathbb{H}}{}^{\mathsf{U}}_{n} \xrightarrow{\begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array}} {}^{n}\underset{\mathbb{C}}{\mathbb{H}}{}^{\mathsf{U}}_{n}$$

$${}^{n}\underset{2}{\mathbb{R}}{}^{\mathsf{U}}_{n} = {}^{n}\underset{2}{\mathbb{R}}{}^{\mathsf{C}}_{n} \cap {}^{n}\underset{2}{\mathbb{R}}{}^{\mathsf{C}}_{n} \xrightarrow{\begin{array}{c|c} 0 & 1 \\ \hline 1 & 0 \end{array}} {}^{n}\underset{2}{\mathbb{R}}{}^{\mathsf{C}}_{n}$$

$$\bar{\sigma}\,\lambda + \bar{\mu}\,\nu = 0 \Rightarrow \begin{array}{c|c} \bar{\sigma} & \bar{\mu} \\ \hline \bar{\lambda} & \bar{\nu} \end{array}\; {}^{n}\underset{2}{\mathbb{C}}{}^{\mathsf{C}}_{n} \begin{array}{c|c} \sigma & \lambda \\ \hline \mu & \nu \end{array} = {}^{n}\underset{2}{\mathbb{C}}{}^{\mathsf{C}}_{n}$$

$$\begin{array}{c|c} \bar{\sigma} & \bar{\mu} \\ \hline \bar{\lambda} & \bar{\nu} \end{array}\; \begin{array}{c|c} a & 0 \\ \hline 0 & a \end{array}\; \begin{array}{c|c} \sigma & \lambda \\ \hline \mu & \nu \end{array} = \begin{array}{c|c} a & 0 \\ \hline 0 & a \end{array}$$

$$\sigma \in \mathbb{C}^{\cup} \Longrightarrow \begin{cases} \begin{array}{c|c} \varkappa\bar{\sigma} & -\varkappa j\bar{\sigma} \\ \hline -i\bar{\sigma} & ji\bar{\sigma} \end{array} \ {}^{n}\underset{\mathbb{C}}{\mathbb{H}}{}_{n}^{\cup} \begin{array}{c|c} \varkappa\sigma & \sigma i \\ \hline \varkappa\sigma j & \sigma ij \end{array} = {}^{n}\underset{*}{\mathbb{H}}{}_{n}^{\cup} \\ {}^{n}\underset{\mathbb{C}}{\mathbb{H}}{}_{n}^{\cup} = \begin{array}{c|c} \varkappa\sigma & \sigma i \\ \hline \varkappa\sigma j & \sigma ij \end{array} \ {}^{n}\underset{*}{\mathbb{H}}{}_{n}^{\cup} \begin{array}{c|c} \varkappa\bar{\sigma} & -\varkappa j\bar{\sigma} \\ \hline -i\bar{\sigma} & ji\bar{\sigma} \end{array} \end{cases}$$

$$\begin{array}{c|c} \varkappa\bar{\sigma} & -\varkappa j\bar{\sigma} \\ \hline -i\bar{\sigma} & ji\bar{\sigma} \end{array} \ \begin{array}{c|c} a & b \\ \hline -\bar{b} & \bar{a} \end{array} \ \begin{array}{c|c} \varkappa\sigma & \sigma i \\ \hline \varkappa\sigma j & \sigma ij \end{array} = \begin{array}{c|c} a+bj & 0 \\ \hline 0 & a+bj \end{array}$$

$$\daleth = a + bj \in {}^{n}\mathbb{H}_{n}^{\cup} \Leftrightarrow \overset{*}{\daleth}{}^{-1} = \daleth = a + bj$$

$$\begin{array}{c|c} \bar{\sigma} & -\sigma i \\ \hline -i\bar{\sigma} & \sigma \end{array} \ {}^{n}\underset{-}{\mathbb{C}}{}_{n}^{\cup} \begin{array}{c|c} \sigma & \sigma i \\ \hline i\bar{\sigma} & \bar{\sigma} \end{array} = {}^{n}\underset{\mathbb{R}}{\mathbb{C}}{}_{n}^{\cup}$$

$$\daleth \in {}^{n}\mathbb{C}_{n}^{\cup} \Longrightarrow \bar{\daleth} \in {}^{n}\mathbb{C}_{n}^{\cup}$$