$$\mathfrak{e}_u \overset{b}{\bigstar} \mathfrak{e}_v = \int_{dz/\pi^d}^{\mathbb{C}^d} {}^{u}\mathfrak{e}_z \, {}^{z}\mathfrak{e}_z^{-b} \, {}^{z}\mathfrak{e}_v = \int_{dz/\pi^d}^{\mathbb{C}^d} {}^{z}\mathfrak{e}_z^{-b} \, {}^{\bar{v}|u}\boxed{\mathfrak{e}}_{\bar{z}|z} = \overline{b}^{-1} \, {}^{u}\mathfrak{e}_v^{b^{-1}}$$

$$\mathfrak{e}_u \overset{b}{\underset{\nu}{\bigstar}} \mathfrak{e}_v = \int_{dz/\pi^d}^{\mathbb{C}^d} {}^{u}_{\nu}\mathfrak{e}_z \, {}^{z}_{\nu}\mathfrak{e}_z^{-b} \, {}^{z}_{\nu}\mathfrak{e}_v = \int_{dz/\pi^d}^{\mathbb{C}^d} {}^{z}_{\nu}\mathfrak{e}_z^{-b} \, {}^{\bar{v}|u}_{\nu}\boxed{\mathfrak{e}}_{\bar{z}|z} = \overline{\nu b}^{-1} \, {}^{u}_{\nu}\mathfrak{e}_v^{b^{-1}}$$

$$\text{LHS} = \int_{dz}^{\mathbb{C}^d} \exp \; z \,\big|\, \bar{z} \; \frac{0 \;\big|\; -b/2}{-\overset{t}{b}/2 \;\big|\; 0} \; \frac{\overset{t}{z}}{\overset{*}{z}} \exp 2 \; \frac{u}{2} \,\Big|\, \frac{v}{2} \; \frac{\overset{t}{z}}{\overset{*}{z}} = \left(\frac{\pi}{2}\right)^d \overline{b/2}^{-1} \exp \; \frac{u}{2} \,\Big|\, \frac{v}{2} \; \frac{0 \;\big|\; 2\overset{t}{b}^{-1}}{2b^{-1} \;\big|\; 0} \; \frac{\overset{t}{u}/2}{\overset{t}{v}/2} = \text{RHS}$$

$$\Re M > 0 \Longrightarrow \int_{dz/\pi^d}^{{}^d\mathbb{C}} {}^{z}\mathfrak{e}_z^{-\nu M} \, {}^{x}\mathfrak{e}_z^{\nu} \, {}^{z}\mathfrak{e}_y^{\nu} = (\nu M)^{-d} \, {}^{x}\mathfrak{e}_y^{\nu/M}$$

$$\left(\frac{\nu M/2 \;\big|\; 0}{0 \;\big|\; \nu M/2}\right)^{-1} = \frac{2/\nu M \;\big|\; 0}{0 \;\big|\; 2/\nu M}$$

$$\int_{dz}^{\mathbb{C}^d} {}^{z}\mathfrak{e}_z^{-\nu M} \, {}^{w}\mathfrak{e}_z^{\nu} \, {}^{z}\mathfrak{e}_\zeta^{\nu} = \left(\frac{\pi}{\nu M}\right)^d {}^{w}\mathfrak{e}_\zeta^{\nu/M}$$

$$\text{LHS} = \int_{dz}^{\mathbb{C}^d} {}^{z}\mathfrak{e}_z^{-\nu M/2} \, {}^{\bar{z}}\mathfrak{e}_{\bar{z}}^{-\nu M/2} \, {}^{\nu w}\mathfrak{e}_z \, {}^{z}\mathfrak{e}_{\nu\zeta} = \left(\frac{\pi}{2}\right)^d \overline{\frac{\nu M/2 \;\big|\; 0}{0 \;\big|\; \nu M/2}}^{-1/2} \, {}^{\nu w}\mathfrak{e}_{\nu\zeta}^{1/2\nu M} \, {}^{\bar{\zeta}}\mathfrak{e}_{\bar{w}}^{1/2\nu M}$$

$$= \left(\frac{\pi}{2}\right)^d \left(\frac{2}{\nu M}\right)^d {}^{w}\mathfrak{e}_\zeta^{\nu/2M} \, {}^{\bar{\zeta}}\mathfrak{e}_{\bar{w}}^{\nu/2M} = \text{RHS}$$