Consider $p=1$. $T = \frac{\sqrt{-1}}{2} \sum t_{ij}\, dz_i \wedge d\bar{z}_j$..

$\left(\frac{\sqrt{-1}}{2}\right)^n (-1)^{\frac{n(n-1)}{2}}$ see p80.

$$\checkmark\, T(\alpha\, dz_1 \wedge \cdots \wedge d\hat{z}_i \wedge \cdots \wedge dz_n \wedge d\bar{z}_1 \wedge \cdots \wedge d\hat{\bar{z}}_j \wedge \cdots \wedge d\bar{z}_n)\, dz \wedge d\bar{z}$$

$$= \frac{\sqrt{-1}}{2} t_{ij}(\alpha)\, dz_i \wedge d\bar{z}_j \wedge dz_1 \wedge \cdots \wedge d\hat{z}_i \wedge \cdots \wedge d\hat{\bar{z}}_j \wedge \cdots \wedge d\bar{z}_n$$

$$= \frac{\sqrt{-1}}{2} t_{ij}(\alpha)\, (-1)^{n+i+j-1}\, dz \wedge d\bar{z}$$

$$\Rightarrow \overline{T(\bar{\alpha}\, d\bar{z}_1 \wedge \cdots \wedge d\hat{\bar{z}}_i \wedge \cdots \wedge d\bar{z}_n \wedge dz_1 \wedge \cdots \wedge d\hat{z}_j \wedge \cdots \wedge dz_n)}$$

$$= \overline{T(\bar{\alpha}\, dz_1 \wedge \cdots \wedge dz_n \wedge d\bar{z}_1 \wedge \cdots \wedge d\hat{\bar{z}}_i \wedge \cdots \wedge d\bar{z}_n)}\, (-1)^{(n-1)^2}$$

$$= \overline{t_{ji}(\bar{\alpha}) \frac{\sqrt{-1}}{2} (-1)^{n+i+j-1}}\, (-1)^{(n-1)^2}$$

$$= \frac{\sqrt{-1}}{2} \overline{t_{ji}}(\alpha)\, (-1)^{n+i+j-1} (-1)(-1)^{(n-1)^2} = \frac{\sqrt{-1}}{2} t_{ij}(\alpha)\, (-1)^{n+i+j-1}$$

$$(-1)^{(n-1)^2+1} \qquad \Rightarrow \quad t_{ij}(\alpha) = \overline{t_{ji}}(\alpha) \Rightarrow t_{ij} = \overline{t_{ji}}.$$

$$(-1)^{\frac{n(n-1)}{2}} (\sqrt{-1})^{(n-1)} \qquad T(\alpha\, \lambda_i (-1)^i dz_1 \wedge \cdots d\hat{z}_i \wedge \cdots \wedge dz_n \wedge (-1)^j \bar{\lambda}_j\, d\bar{z}_1 \wedge \cdots \wedge d\hat{\bar{z}}_j \wedge \cdots d\bar{z}_n)$$

$$= (-1)^{\frac{n(n-1)}{2}} (\sqrt{-1})^{(n-1)} \quad \lambda_i \bar{\lambda}_j\, t_{ij}(\alpha) \frac{\sqrt{-1}}{2} (-1)^{2(n-1)}$$

$$(-1)^{\frac{n(n-1)}{2}} (\sqrt{-1})^n\, \lambda_i \bar{\lambda}_j\, t_{ij}(\alpha) \geq 0$$

Now I understand the signs in the definition.

Definition: T is real if $\overline{T(\varphi)} = T(\bar{\varphi})$..

Given $T = \frac{\sqrt{-1}}{2} \sum t_{ij}\, dz_i \wedge d\bar{z}_j$, $\quad t_{ij}(\alpha) =$