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Simetriklikten dolayı

$S_{11} = 0$, $S_{44} = 0$, $a_4 = 0$

$I_3 = -I_4 \Rightarrow \dfrac{V_{a_3} - V_{b_3}}{z_0} = \dfrac{V_{b_4}}{z_0}$

$a_3 - b_3 = b_4$ $a_3(1 - \Gamma_3) = b_4$ $\Gamma_3 = \dfrac{\frac{4z_0}{3} - z_0}{\frac{4z_0}{3} + z_0} = \dfrac{1}{7}$

$\dfrac{6a_3}{7} = b_4$, $a_3 = \dfrac{7b_4}{6}$
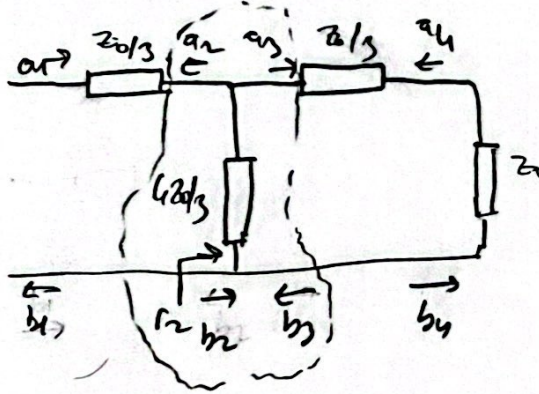
$a_1 \rightarrow b_2 \rightarrow a_3 \rightarrow b_4$

$V_2 = V_3$ $V_{a_2} + V_{b_2} = V_{a_3} + V_{b_3}$

$a_2 + b_2 = a_3 + b_3 \Rightarrow a_3 + \dfrac{a_3}{7} = \dfrac{8a_3}{7} = \dfrac{8}{7} \times \dfrac{7}{6} \times b_4$
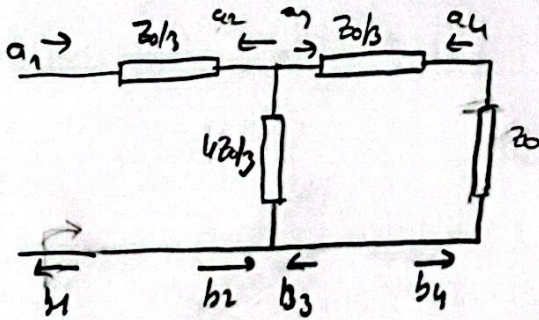
$\Gamma_3 = \dfrac{b_3}{a_3} \Rightarrow b_3 = \dfrac{a_3}{7}$ $a_2 + b_2 = \dfrac{4b_4}{3}$

$b_2(\Gamma_2 + 1) = \dfrac{4b_4}{3}$

$\dfrac{4b_2}{5}\left(1 - \dfrac{1}{5}\right) = \dfrac{4b_4}{3} \Rightarrow \dfrac{4b_2}{5} = \dfrac{4b_4}{3}$

$\Gamma_2 = \dfrac{\frac{2z_0}{3} - z_0}{\frac{2z_0}{3} + z_0} = \dfrac{\frac{-z_0}{3}}{\frac{5z_0}{3}} = -\dfrac{1}{5}$ $b_2 = \dfrac{5b_4}{3}$

$I_1 = -I_2$ $\dfrac{V_{a_1} - V_{b_1}}{z_0} = \dfrac{V_{b_2} - V_{a_2}}{z_0}$ $a_2 = \Gamma_2$

$a_1 - b_1 = b_2 - a_2 \Rightarrow a_1 = b_2(1 - \Gamma_3)$

$\boxed{b_1 = 0}$ $a_1 = \dfrac{6b_2}{5}$, $b_2 = \dfrac{5b_4}{3}$

$a_1 = \dfrac{6}{5} \times \dfrac{5}{3} \times b_4 \Rightarrow a_1 = 2b_4$

$S_{11} = S_{22} = 0$, $S_{12} = S_{21} \Rightarrow \dfrac{b_4}{a_1} = \dfrac{1}{2} \Rightarrow S = \begin{bmatrix} 0 & 1/2 \\ 1/2 & 0 \end{bmatrix}$

$S_{11} S_{12}^* + S_{21} S_{22}^* = 0$ olmalı   ve $(S_{11})^2 + (S_{21})^2 = 1$ olmalı

Sıfır : $0 = 0$ sağlandı   Üniterlik: $0^2 + \dfrac{1}{4} \neq 1$ sağlanmadı

2. özelliği sağlayamadığından kayıplıdır.