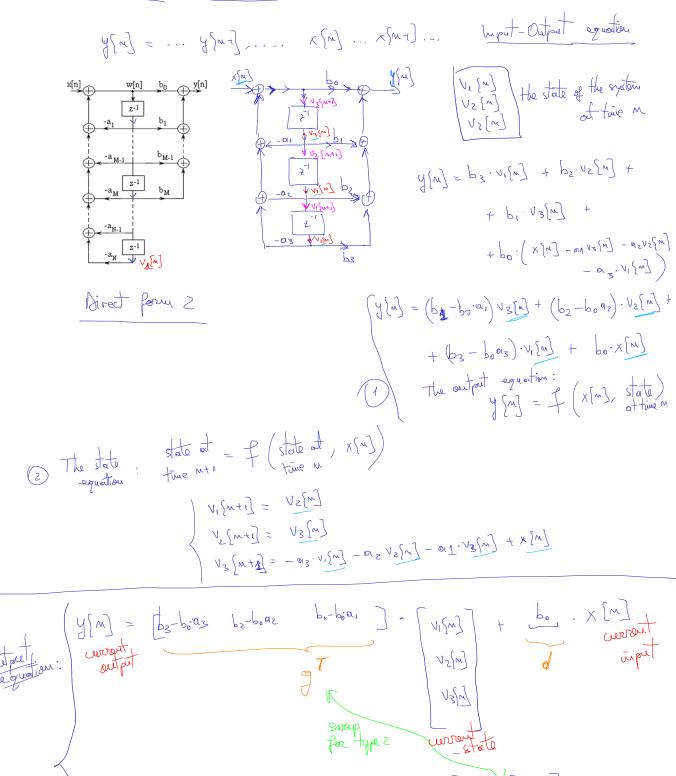
Lecture 06 State - sporce implementations

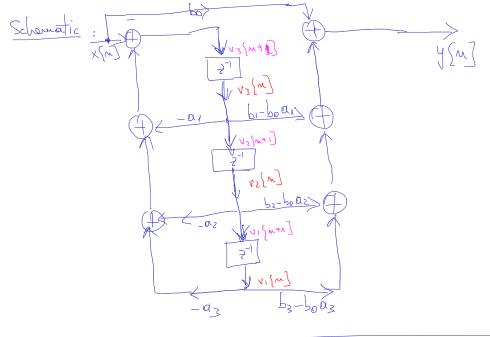


State

$$\begin{bmatrix}
V_1 \{ n \neq 1 \} \\
V_2 \{ n \neq 1 \} \\
V_3 \{ n \neq 1 \} \\
-\alpha_1 \\
-\alpha_2 \\
-\alpha_1
\end{bmatrix}$$
The x1

State-space implementation Type I

Type I



State - space type 2 · Some expressed, starting from Birect Form 2 Transposed Equations: - + gets transport - g, g are swapped $Otto \\ Q_{2} \\ V_{2}[u] \\ V_{3}[u] \\ V_{3}$ Stole stole $V_{2}[n+1] = \begin{bmatrix} 0 & 0 & -a_{3} \\ V_{2}[n+1] \end{bmatrix} + \begin{bmatrix} b_{3}-b_{0}a_{2} \\ b_{2}-b_{0}a_{2} \end{bmatrix} \times \begin{bmatrix} a_{1} \\ b_{2}-b_{0}a_{3} \end{bmatrix} + \begin{bmatrix} b_{3}-b_{0}a_{2} \\ b_{2}-b_{0}a_{3} \end{bmatrix} \times \begin{bmatrix} a_{1} \\ b_{2}-b_{0}a_{3} \end{bmatrix} + \begin{bmatrix} b_{3}-b_{0}a_{3} \\ b_{2}-b_{0}a_{3} \end{bmatrix} \times \begin{bmatrix} a_{1} \\ b_{2}-b_{0}a_{3} \end{bmatrix} \times \begin{bmatrix} a_{1} \\ b_{2}-b_{0}a_{3} \end{bmatrix} + \begin{bmatrix} b_{3}-b_{0}a_{3} \\ b_{2}-b_{0}a_{3} \end{bmatrix} \times \begin{bmatrix} a_{1} \\ b_{2}-b_{$