Signal Flow Graphs and Transposed Realizations



Direct Form II Block Diagram

Direct Form II Signal Flow Graph



Both branch points and summing junctions are indicated by **nodes**. Each signal leaving a node is the sum of the signals entering the node. The input signal comes from a **source node** and the output signal goes to a **sink node**. A theorem from signal flow graph theory says that if we reverse the direction of all branches and exchange the input and output nodes, the system's transfer function remains

the same.

Reversed Direct Form II Flow Graph



#### Transposed Direct Form II Block Diagram

