

The schematic diagram illustrates a 10-bit digital-to-analog converter (DAC) using a current mirror array and a resistor ladder. The circuit is divided into several sections:

- Reference Current Source:** A current source is formed by a resistor and a diode connected to a reference voltage (V_{REF}).
- Current Mirror Array:** A series of 10 current mirrors are connected to the reference current source. Each mirror is controlled by a digital input bit (D₉ to D₀).
- Resistor Ladder:** A resistor ladder network is connected to the outputs of the current mirrors. The ladder consists of resistors connected to a reference voltage (V_{REF}) and a common output node.
- Output Stage:** The output of the resistor ladder is connected to a load resistor (R_L) and a common output node.

The circuit is designed to convert a 10-bit digital input into a proportional analog output voltage.

The diagram illustrates a 10-bit DAC architecture. It features a current mirror array consisting of 10 stages, each represented by a triangle symbol. The array is connected to a resistor ladder network, which is a series of resistors forming a voltage divider. The output of the DAC is taken from the node between the last two resistors in the ladder. The diagram also shows the power supply connections, including a positive supply (V_{CC}) and a negative supply (V_{EE}), and the ground connection (GND).