

BINARY TO GREY CODE CONVERTER

Theory:

Gray codes are used in rotary and optical encoders, Karnaugh maps, and error detection. The hamming distance of two neighbours Gray codes is always 1 and also first Gray code and last Gray code also has Hamming distance is always 1, so it is also called *Cyclic codes*.

This circuit has implemented using logical gates and components present in the esim

Schematic Diagram:

The below is the schematic diagram of a Binary to Greyscale

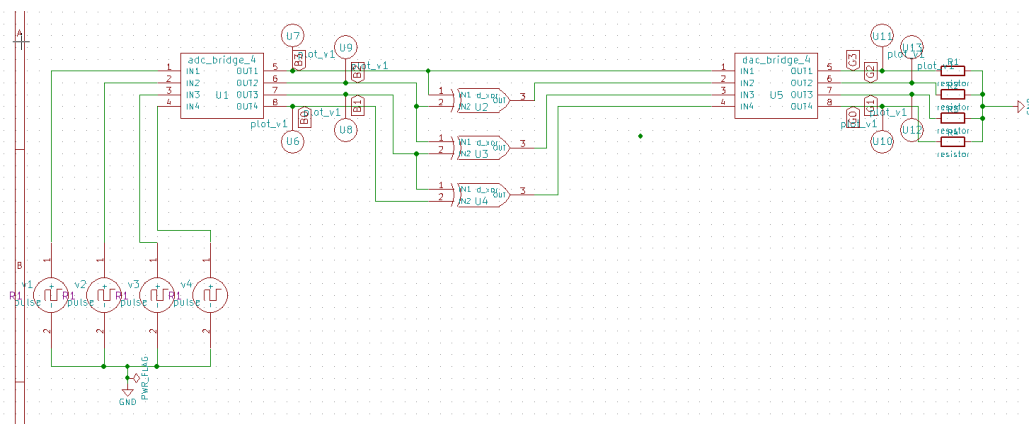


Figure 1: Code Converter

Simulation Result:

Ng spice Simulation:

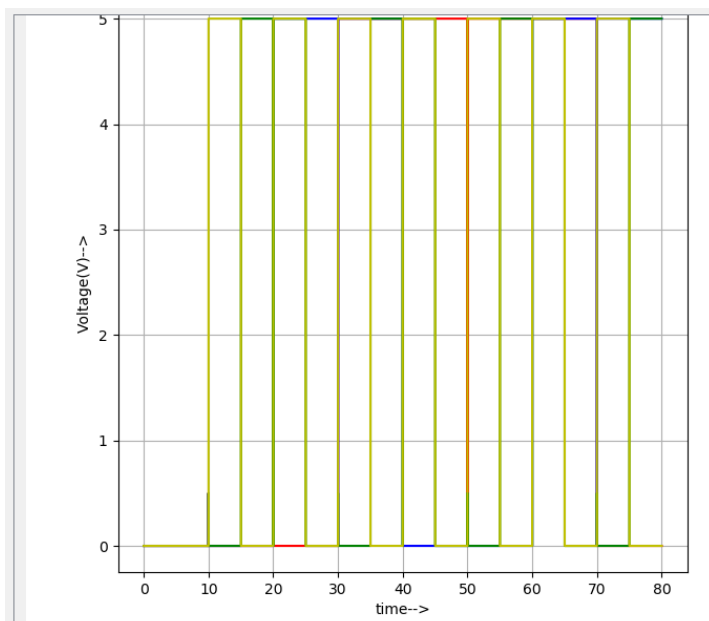


Figure 2:For G3,G2,G1,G0

References:

<https://www.tutorialspoint.com/conversion-of-binary-to-gray-code>