

Answer on Question #50707, Physics, Electric Circuits

8.

a) Convert 0010001010000110 (BCD) into its binary equivalent and then divide it by 100102. Express your result in octal equivalent.

b) Design a half adder circuit using only NAND gates.

Answer:

a)

$$0010001010000110_{bcd} = 2286_{10} = 100011101110_2$$

$$\frac{2286_{10}}{100102_{10}} = 0.228 \dots_{10} = 0.0011101 \dots_2$$

b)

<http://www.electronicshub.org/half-adder-and-full-adder-circuits/>

