

PRE-LAB

Design a BCD (4-input) to seven-segment display driver. You can design it in one of two ways. First method is to develop a complete truth table, express each segment function in either SOP or POS form, and minimize each function using K-map techniques (or Boolean algebra). Second method is to figure out how to use the 7447 chip supplied in the standard library. Both methods require the use of the Altera manual to help understand the seven-segment display.

LAB

Implement your design on the Altera board and demonstrate its functionality to your instructor. Use 4-bit binary coded decimal as input to your display driver.