

7 Segment Display

The 7-segment displays are in small projects that require simple numerical or letter outputs, such as clocks and sensors. Different types of displays are mentioned, including single-digit and two-digit configurations. Emphasis is placed on checking the datasheet for pinout information. The LTS 546 A display consists of eight individual LEDs (seven segments plus one decimal point) connected in a common anode configuration.

An alternative method for controlling the display without an Arduino is introduced: using a BCD to seven-segment driver (SN 74LS247), which operates with active low levels. The setup process involves connecting power and ground while using resistors to limit current. A lamp test feature confirms functionality by lighting all segments.

To control inputs without an Arduino, a 4-bit binary counter (SN74290) is suggested due to its BCD count sequence compatibility.

For projects requiring multiple digits, multiplexing is recommended. This allows control over more than one digit while minimizing pin usage.

The SI1064 IC is introduced as a solution for handling multiple displays through I²C communication protocol supported by Arduino.