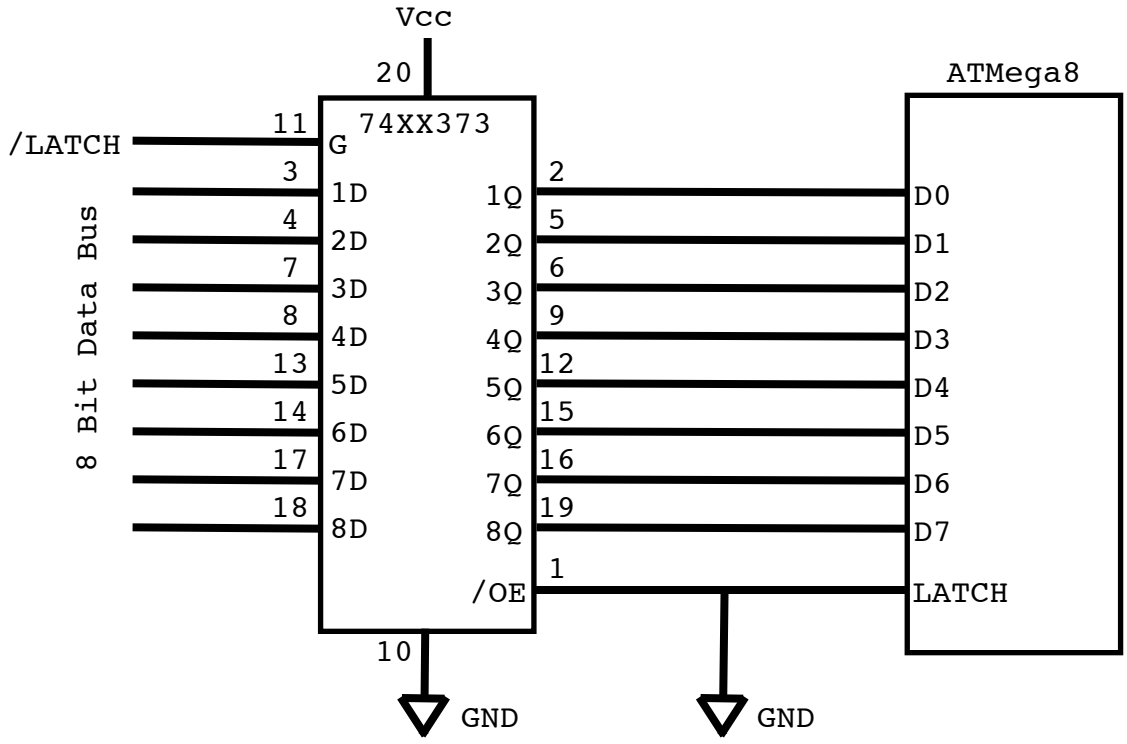
ATMega8 Dual Hexadecimal Display Driver Application Notes

Display Driver Used with an External High Speed Latch

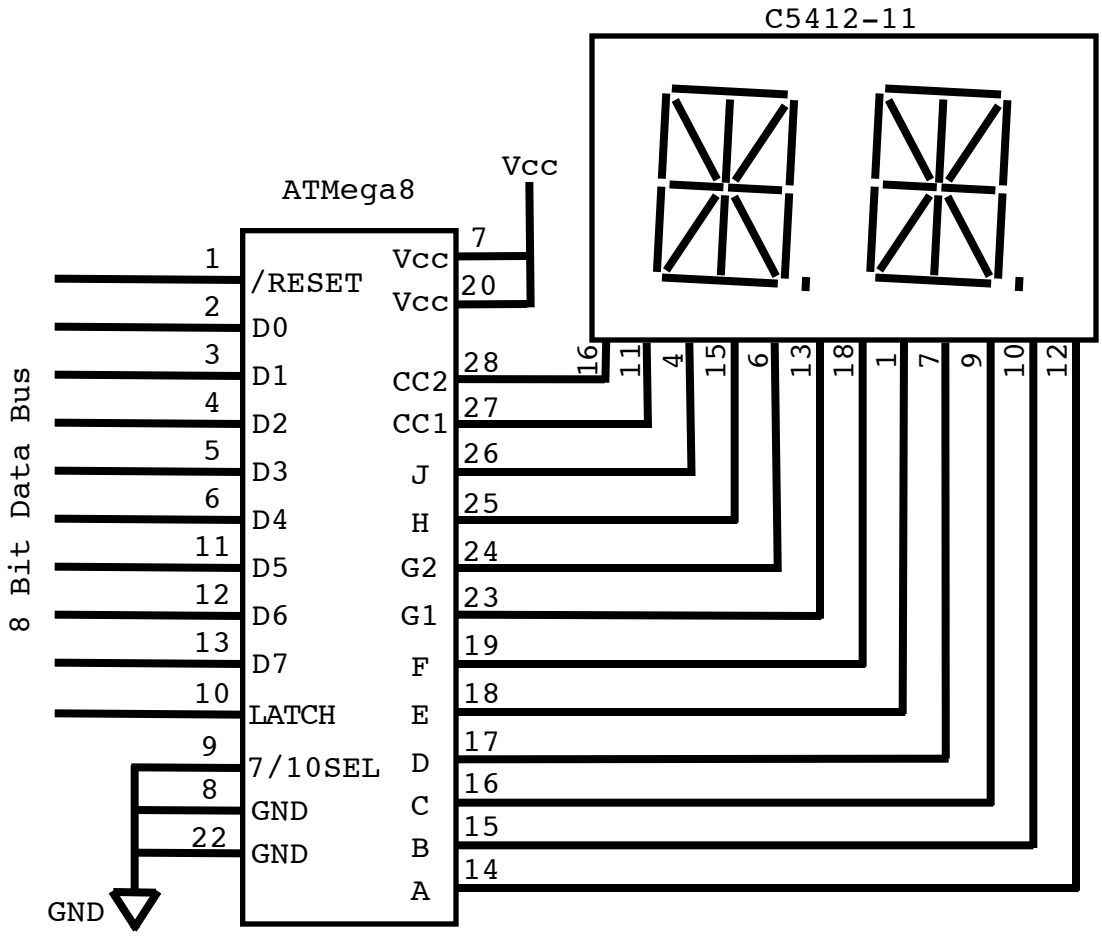
For circuits where the native data sample rate of the ATMega8 Dual Hex Display driver program is not sufficient to obtain data from the host system, an external latch can be used to capture the display data and retain it.

For example, an octal data latch can be used as follows:



The 74XX373 may be of any compatible logic family, e.g. 74LS373, 74HC373, etc.

Display Driver Used With C5412-11 Dual Digit 15 Segment LED Display:

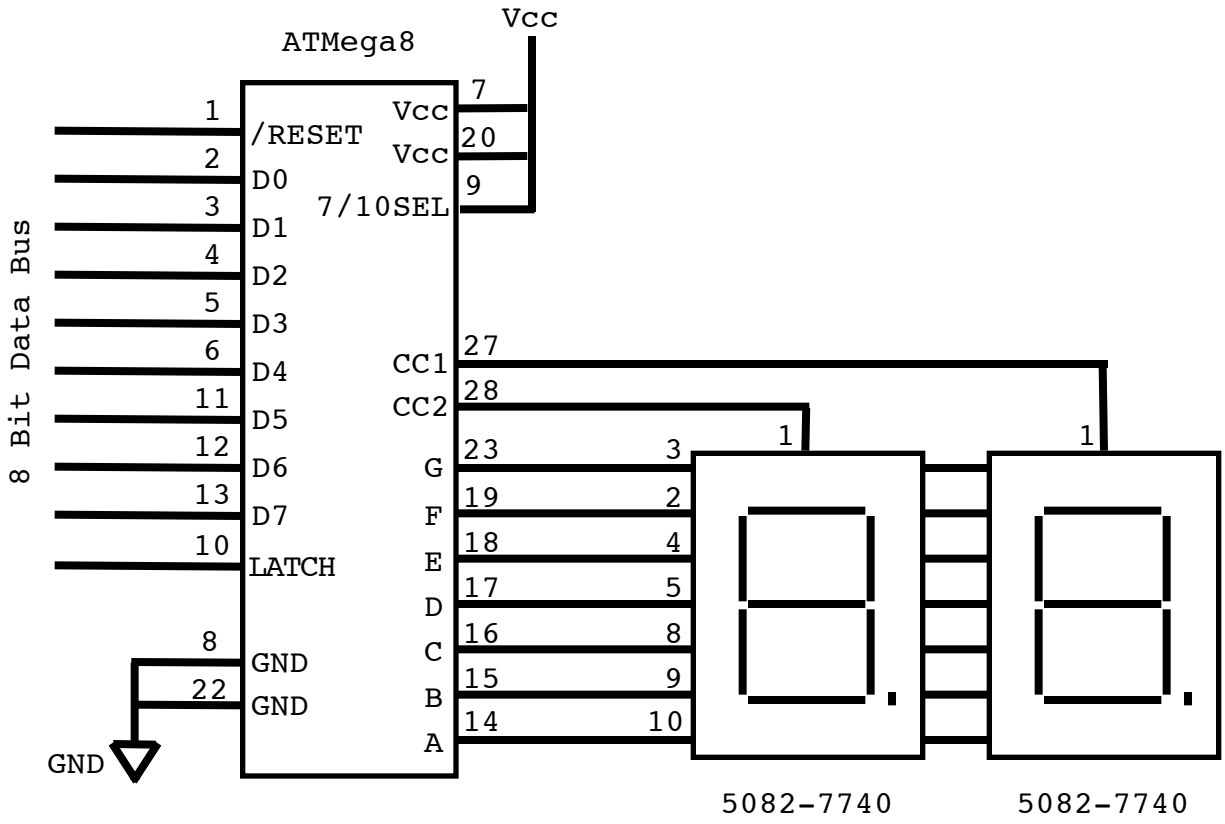


For this application, 10 of the 15 segments of each character/digit of the C5412-11 display is used as a 10 segment LED display. The 7/10 segment select line is tied low to select the 10 segment character set.

Alternatively, the 7/10 segment select line may be tied to a switch, allowing either character set to be selected at startup according to the position of the switch at that time. The 7 segment character set has been programmed to echo the value of G on the G2 line, allowing the 7 segment character set to be used on 10 or 15 segment displays.

The /RESET line may be used as a display blank control to reduce power utilization by the displays. The conventional programming of the fuses for this display driver will result in a delay of about 5mS before the ATMega8 is ready to receive data after the time that /RESET is released.

Display Driver Used With Two 5082-7740 LED Displays:



In this application the 7/10 segment select line is tied high to select the 7 segment character set, which uses the lower case form of letters ‘b’ and ‘d’.