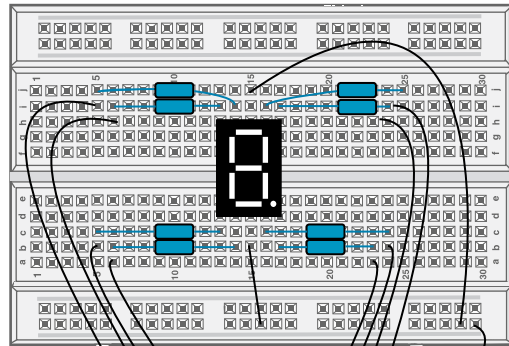


Chapter 16 — 7-segment LED

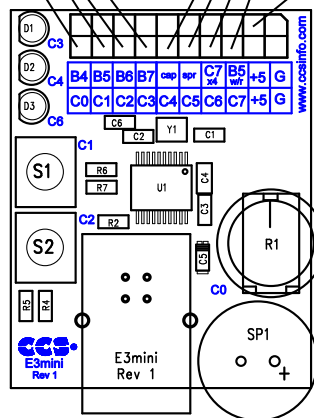


680Ω resistor

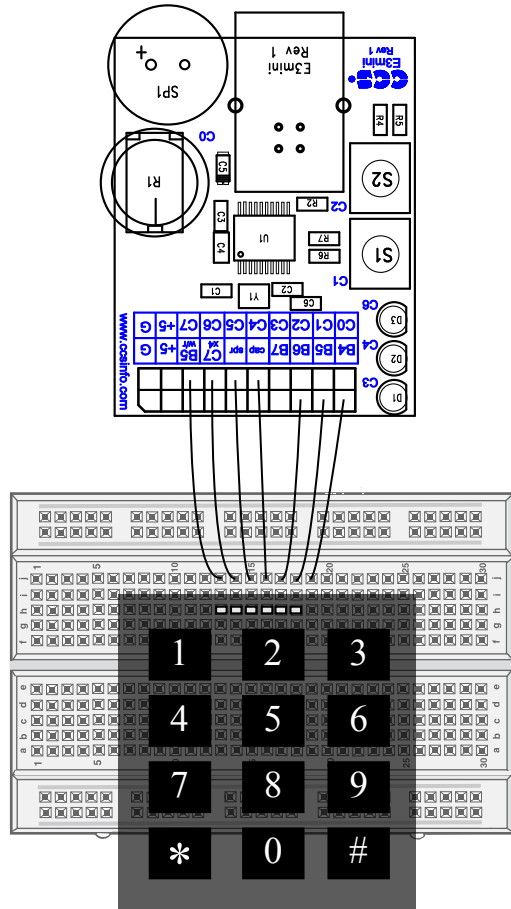
Note: This is a common anode display.
The text book references a common cathode.

Link to 7-segment LED data-sheet:

http://optoelectronics.liteon.com/upload/download/DS-30-96-066/S_110_LTS-6960HR.pdf

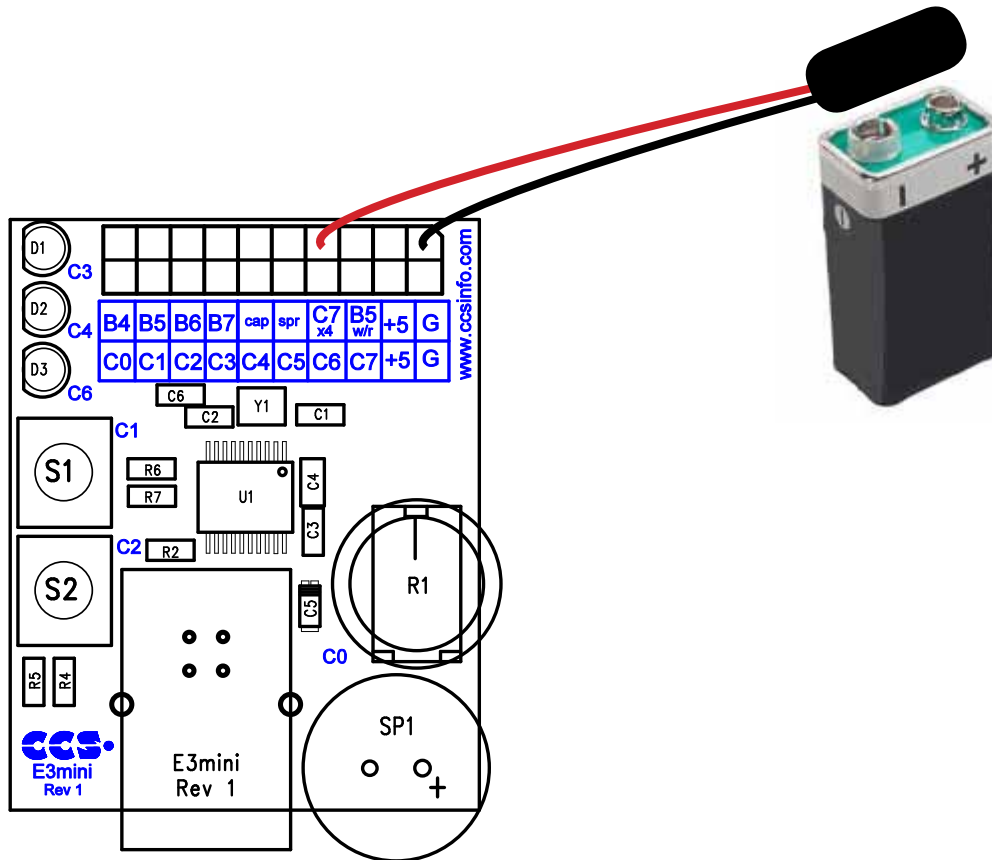


Chapter 16 — Keypad

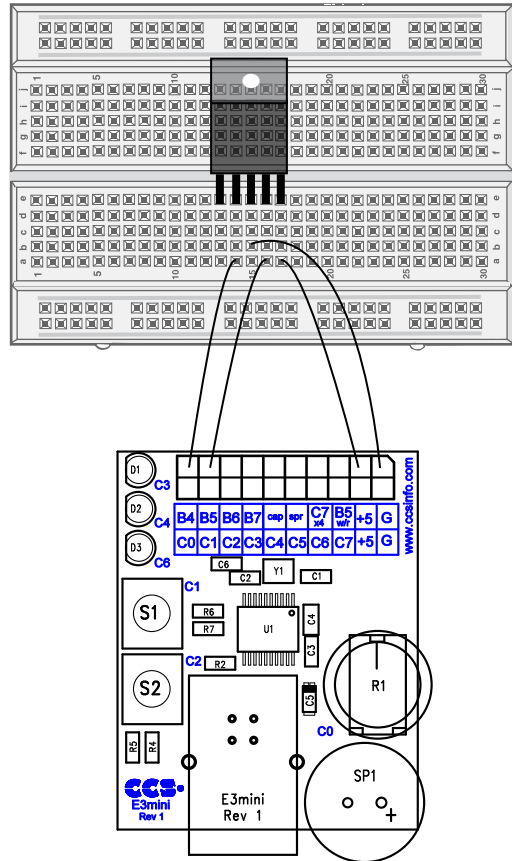


Note: Enable port B pull-ups to avoid external resistors.

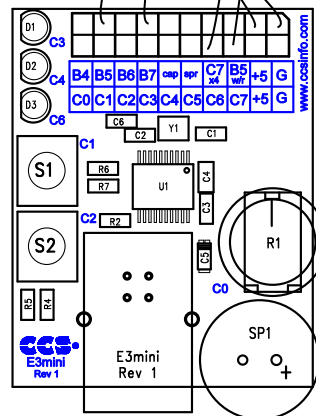
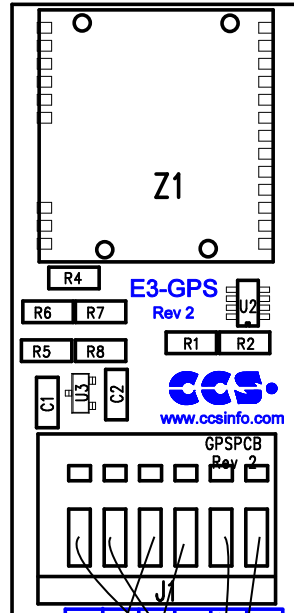
Chapter 20 — 9 Volt Battery



Chapter 21 — TC74



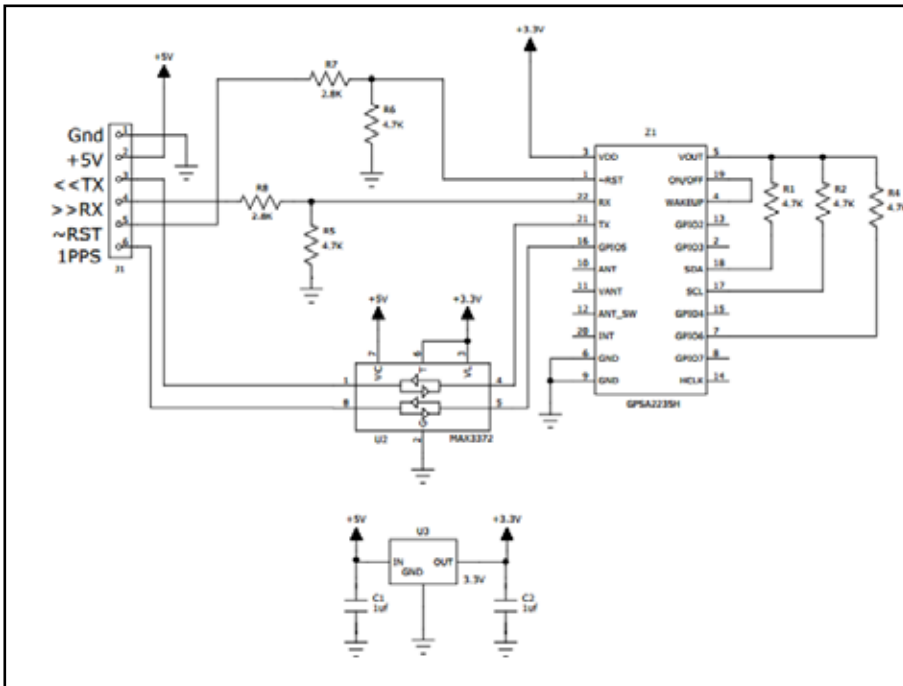
Chapter 22 — GPS Module



5V GPS Module

Connections to the module

GND	Ground	To Development Board ground
+5V	Power in	To Development Board +5V
<<TX	Data from GPS (TTL)	To Development Board UART RX pin Default baud rate 4800
>>RX	Data to GPS (TTL)	To Development Board UART TX pin Default baud rate 4800
~RST	Reset when low	To any free PIC pin, or to +5V Pull low for a second to issue a proper reset
1PPS	One pulse per second from GPS	Optional output to PIC



GPS Protocol documentation:

<http://www.gpsinformation.org/dale/nmea.htm>

GPS Module data sheet:

http://www.mouser.com/ds/2/251/Maestro_GPS_Receiver_A2235_H_User_Manual_V12-301680.pdf