



1. Use two 5mm round or 2x5mm rectangular LEDs per segment. Short LED lead is negative. Can use red, yellow, or green LEDs.
2. Cut trace to Q2 collector (VCC), and connect it to VIN instead.
3. If C1 exceeds 10vdc, add a heatsink to U2, or replace it with an LM317T (TO-220).
4. If R3 is changed to increase voltage for blue or white LEDs, remove 5.1v zener D11 and 5.5v supercapacitor C5 from the 1802MC.

Title		
Membership Card CLOCK		
Size	Document Number	REV
A	C:\ORCAD\SHEET\1802\CLOCK.SCH	A
Date:	June 6, 2019	Sheet 1 of 1