Unless otherwise specified:
All Diodes 1N4148
All NPN MPS 6531
All PNP MPS 6534
All Resistors +10% 1/4W
All Capacitors Ceramic
NOTE: DO +5 Powers
IC's N123, S02, LS14, S38, and
74C925
Bypassing: .01uf decap from DO +5
to gnd. at each IC (5 places), plus
one 50uf tantalum from DO +5 to
gnd. (Mallory TT15X50A) C1.
Pin numbers reflect M&M layout
for CSL EMS model D0

Design: Rosen

Rev Date: 6/11/79
Notes:

1) Mounting holes .188 dia, 6 places

2) 7-segment displays are Monsanto MAN6640. Package is 18 pins, 2 rows on .6 centers. Pin 1 is as shown.

3) START and OFF are C&K 8221 Momentary contact buttons with .465 square button.

4) J1, J2, and J3 in the schematic are not connectors, but are closely spaced groups of holes suitable for connecting discrete wires.

5) The TMS 1000C is a 28-pin DIP. Pin-to-pin spacing is .100, row to row spacing is .600.

6) The NiCad battery will be attached to the board with two cable clamps secured to the mounting screws.

7) Pin 1 of these LED's is the side containing the marking "MAN6640".

8) Note that switches must be oriented with "C" and "NC" as shown.
Originally released as rev Ga.

Changes for revision Ga to Gb (4-27-79 CT)
1) Changed IC2 from S3B to N3B
2) Changed CB from 100 pf to 200pf
3) Changed R2 from 470 ohms to 47 ohms (initial loading chart was incorrect).
4) Removed components C13, C14, and R39

Changes for revision Gb to Gc (6-11-79 CT)
1) Added .01uf cap and 1k resistor in series with PnIBoot. This is the line that boots the machine; this change causes the boot signal to be a negative-going pulse at the end of the ~700ms time delay that starts when the boot button is released.
2) Added NPN emitter follower to signal TimeOut to assist the feeble CMOS output of the TMS1000C.