

Model 420C 4K Memory Board

Description:

The 420C is an extremely economical 4K by 8 RAM memory board which uses standard 2102 memories. The 420C features battery back-up capability when used with L-type 2102s. Battery back-up can be done via two on-board Ni-Cad AA cells and/or an external power source. The board also has switchable and externally programmable write protect. The 420C has 18 address bits, allowing up to 256K bytes of memory by using memory management or block switching techniques. The 420C can be populated for 4K by 12 bits for use with the 560Z's PDP-8 equivalent 6100 chip. The 420C is carefully laid out so that plated through holes are not required at the memory chip pins (The board does, of course, have plated through holes). This feature allows easy replacement of soldered-in memory chips without danger of damaging the board. This eliminates the need for sockets on memory boards.

Applications:

The 420C Memory Board is used as the main memory in medium sized OSI systems (4K to 16K). It can be used as pseudo-ROM via the write protect and battery back-up options. The 420C is used as the memory for the 6100 in the 560Z (4K by 12) and as the dedicated graphics memory on 440 systems with the graphics option (2K by 8).

Specifications:

Mechanical: 8" X 10" G-10 double-sided plated through hole board

Electrical: +5V at 600ma to 1,000ma depending on memory type

Supports: 1K, 2K, 3K, or 4K by 8; or 1K, 2K, 3K, 4K by 12 memory.
Uses any zero data hold-type 2102 memory such as 9102.
91L02, 2102AL, 2102LFPC

Options: Battery Back-up, Write Protect, 18-Bit Address

OHIO SCIENTIFIC

product name/number

420C/422/425/426/427/CM-1/CM-2

date

8/77

revision

C

page

14

status

Production

sheet 1 of 1

420C PARTS LIST

- 1 Model 420C Memory Expansion Board
- 2 8T26 Buffers (3 for 12-bit operation)
- 8 to 48 2102 Type Memories
- 3 7420
- 2 7404
- 1 7430
- 1 7417
- 1 IN914 (D₂)
- 19 Bypass Capacitors .1uf Typical
- 1 25uf Electrolytic
- 9 1K 1/4 watt R₁ - R₉
- Battery Backup (Optional)
- 1 25uf Capacitor
- 3 IN4001 (D₃, D₄, D₅)
- 1 Switch (SW₂)
- 1 100 ohm 1/4 watt (R₁₁)
- Write Protect (Optional)
- 1 Switch (SW₁)
- Accessories Not Supplied by OSI (Optional)
- 4 or 5 Molex KK-156 Connectors (Supplied with Backplane Boards)
- 2 Nicad "AA" Cells
- 1 LED and 100 ohm Resistor (R₁₀)
- 1 Wait Diode IN914 (D₁)

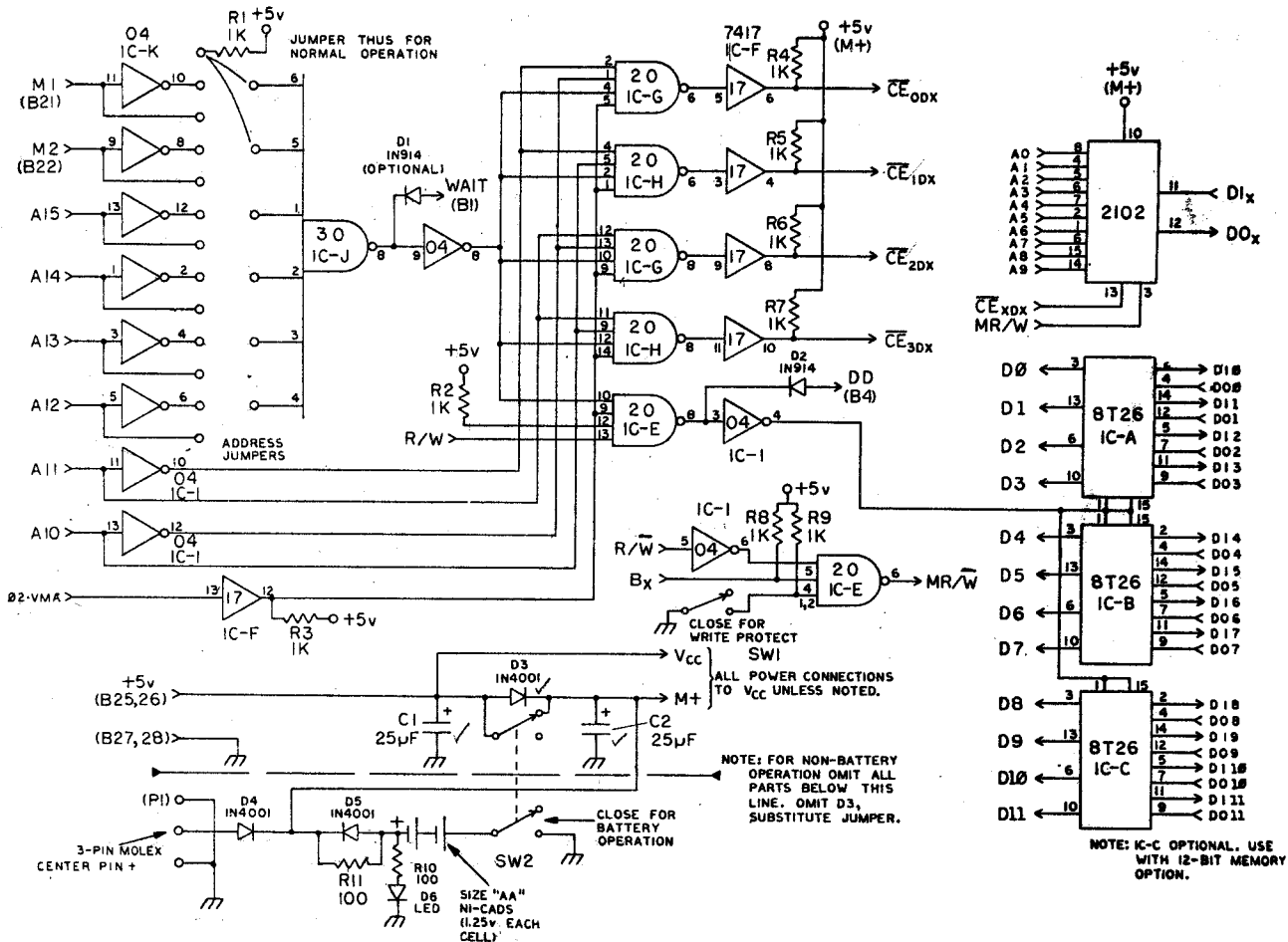


DIAGRAM 1