**Z80 Modular Computer System Requirements**

**Modularity** – Each system function should be performed by a specific card, and all cards interconnected through a backplane. Initially proposed cards:

1. CPU (required) – Z80 CPU, 4MHz clock, reset pushbutton, HALT state indicator (LED), power-on reset.
2. Memory (required) – 64KB (EPROM and SRAM), hardware selectable (dipswitch or jumper) ROM block for boot (0, 1, 2 or 3, each block is 1/4 of a 64KB ROM), software selectable memory configuration (lower 16KB ROM, upper 48KB RAM or full 64KB RAM), software selectable RAM bank (0 or 1, each bank is 1/2 of a 128KB static RAM).
3. Serial I/O (required) – one RS-232 port with configurable parameters (9600/19200bps, 7/8 bits, 1/2 stop bits, odd/even/no parity, and no hardware flow control).
4. Storage/Disk (required) – due to the high cost and difficulty to find floppy drives and disks, the storage will be emulated by a 128MB compact flash, formatted in 16 drives (A trough P) each containing 8MB.
5. Backplane (required)
6. Power supply (required) – 5V/2A output, 220Vac input.
7. VGA (optional)
8. PS/2 keyboard (optional)

**Operating System** – Run CP/M 2.2

**Technology** - Use mainly integrated circuits available in the 1980's (74LSxx).

**Dimensions** – All cards (including backplane!) must be 7 x 10cm, which is a very popular dimension and cheap option among prototyping PCBs.