**ROMcard2 memory organization and management:**

* The ROMcard2 is intended to work with EPROM 27C040 and compatible.
* The ROM is organized in 256 banks of 2kB each, numbered #00 to #FF
* Banks are selected by writing a byte (#00 - #FF) into $C0Nx, where N = 8 + [slot number]
* When writing to $C0Nx at the same time the ROM chip is also enabled
* When a bank is selected, its content are seen in the address space $C800-$CFFF
* To de-enable the ROM chip a write must be performed to address $CFFF or reset executed
* If a user program is accessing the card, it is important that at the end a write is performed to $CFFF so that the card is deactivated and does not conflict with other hardware, which is using the same address space.
* The bootloader is programmed in the lowest 256 bytes of the ROM chip
* The boot loader is always available at addresses $CM00-$CMFF, where M = [slot number]
* The bootloader can also be seen at addresses $C800-$C8FF of bank #00
* Each program must be recorded in the ROM as follows:
  + 4 markers – #AA #D5 #55 #2A, always starting at an address $xxx00 – multiple of #100
  + 16 bytes with the name of the program
  + 2 bytes indicating the start address of the program
  + 2 bytes with the length of the program
  + The actual binary code of the program
* Recommended installation is on Slot 7.
* The boot loader has functionality that it captures the boot sequence of the computer and executes the first program recorded onto the ROM – usually DOS.
* If ”\” is pressed while performing a cold reset – the boot sequence will override the ROMcard2 boot so floppy disk can boot.
* Programs are called with “&” followed by the number of the program
* &2 calls the program which returns a list of programs recorded onto ROMcard2
* Boot Loader V2:

