

CUBIX for the *N8VEM* HOST PROCESSOR

SYSTEM CONFIGURATION

CUBIX IS A PRODUCT OF
DUNFIELD DEVELOPMENT SERVICES

WWW.DUNFIELD.COM

ORIGINAL CUBIX SOURCES LOCATED AT

<http://www.classiccmp.org/dunfield/d6809/cubix.htm>

CONVERSION FOR THE N8VEM
BY DAN WERNER

I. 6809 HOST PROCESSOR ROM

The 6809 ROM image is located in the m6809 folder in the zip file. The ROM image does not require any configuration and can be built by executing the m6809 script located in the zip file.

The Rom Commands are as follows:

Dxxxxyyy	Dump memory from xxxx (in hex) to yyyy (in hex)
L	Load a Motorola format image file
Mxxxxyy	Change Memory byte at location xxxx (in hex) to value yy (in hex)
P	Print Stack
Gxxxx	Transfer execution to location xxxx (in hex)
B	Load CUBIX image and boot it

In order to boot CUBIX it is important that the file CUBIXIMG.BIN is on the active drive when the B [oot] command is given. This file is generated by the BUILD CUBIX script and will be in the CUBIXOS folder.

II. CP/M controller program

DWCON09.COM located in the m6809 folder is a CP/M program that handles all I/O for the 6809 host processor. This program is also built by the M6809 script and does require configuration.

At the beginning of the source file you will find the following lines:

```
.....  
: CONFIGURATION  
: .....
```

```
USEFLOPPYA .EQU 01 ; NONZERO = USE FLOPPY FOR DRIVE "A"  
USEATAPIB .EQU 01 ; NONZERO = USE ATAPI ZIP DRIVE (IDE  
; SECOND) FOR DRIVE "B"  
USEIDEC .EQU 01 ; NONZERO = USE IDE HDD (IDE PRIM) FOR DRIVE "C"  
IDEOFFSET .EQU $50 ; SET FOR STARTING OF IDE PARTITION  
; PARTITION SIZE IS $FFFF SECTORS (32MB), AND LBA  
; ADDRESS  
; WILL BE 00XXXX, WHERE 00 IS OFFSET AND XXXX ARE  
; SECTORS  
; 0000-FFFF.  
USEDISKY .EQU 01 ; NONZERO = USE DISK DEVICE FOR DISK IO STATUS
```

It is necessary to set the flags to indicate which drives your system supports and if your system supports the DISK device. It is also necessary to set the offset sector to position the 32mb partition on the IDE hard drive, if your system supports it.

CUBIX will refer to the drives as floppy = A:, ATAPI ZIP drive = b:, IDE hard drive = c:

In order to boot CUBIX it is important that the file CUBIXIMG.BIN is on the active drive when the B [oot] command is given

III. Disk Preparation Programs

CUBPRPA, CUBPRPB, and CUBPRPC programs are programs used to create the CUBIX file systems for the A, B, and C drives. It is necessary for all media that is going to be used to store CUBIX files to be prepared. These programs are stored in the m6809 folder and built with the m6809 script. The CUBPRPC program does require that the IDE offset be set to match the IDE offset that is set in the the DWCONS09 program.

IV. CUBIX OS

The source files for the CUBIX OS are stored in the CUBIX OS folder and built with the BUILD CUBIX script. All of the N8VEM specific code is stored in the DRIVERS.ASM file. No modification of these files are necessary to build and run CUBIX. However, if you are interested in customizing CUBIX, all of the documentation to do so is available in the DOCS folder.

V. CUBIX Utilities

All of the CUBIX utilities are stored in the CUBIXUTIL folder, and can be built with the BUILD CUBIXUtil script. Once the programs are built, you can use the CUBIX DOWNLOAD internal command to download the Motorola format files and save the binary images to disk.

Example:

```
DOWNLOAD 1 C:[SYSTEM]DIR.EXE
```

For more information see the CUBIX system Description and Users guide in the DOCS folder.