FLEX CPU09CMI Utilities

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Preliminary version 0.0

BOOTON – Version 2

Show floppy disk cable type.

SYNTAX

BOOTON

DESCRIPTION

If FLEX did boot from floppy drive:
it show the disk drive cable type.

1 = Straight FLEX cable
5 = PC cable (twisted)

If FLEX did boot from IDE drive:
it show the cable type and will ask if you want change it.
And if de cable type is not 1 or 5
it will ask to set the correct type.

```
+++BOOTON
No BOOT cable found
Set cable code 1/5 ?1
+++

+++BOOTON
BOOT on Straight cable (code=1)
Change cable code y/n ?y
+++BOOTON
BOOT on PC cable (code=5)
Change cable code y/n ?
+++
```

NOTE:
Manual change the cable type:

```
+++MON
cmi-bug 1.5 - 60k

>M F7EE
 - F7EE 05 01
 - F7EF 00
>
WARM start FLEX
```

CMILINK - Version 1.0

Links FLEX to BOOT loader.

SYNTAX

CMILINK <flex.sys>,<drivenr>

DESCRIPTION

Links FLEX on a IDE drive in the boot loader on sector 0.

Links FLEX on a Floppy drive in the boot loader on sector 1.

CMISTEP - Version 2.0

Change Floppy drive step rate.

SYNTAX

CMISTEP

DESCRIPTION

Depending on the FLEX disk driver:

cmi_io2
cmi_io4
cmi_io4x
cmi_io4A

It will set the disk step rate for all the floppy drives.

cmi_io4B
cmi_ide
cmi_ide2

It will set the disk step rate for each floppy drive separate.
And set double step for each floppy drive separate.

FDRIVES - Version 1.2

Show all drives in FLEX.

SYNTAX

```
      FDRIVES <options>
```

DESCRIPTION

FDRIVES will report current settings and can swap partitions.

Command line format:

```
                    report current settings
                          drives<cr>

                    hard drive parameters
                       drive n t d p    n = logical drive
                                        t = type W or F
                                        d = physical strapped drive
                                        p = partition on hard drive

                    floppy drive parameters
                       drive n t d      n = logical drive
                                        t = type W or F
                                        d = physical strapped drive
```

SEE ALSO

IDEFMT, PLIST

IDEFMT - Version 5.3

FLEX IDE Disk formatter.

SYNTAX

```
      IDEFMT [0 | 1]
```

DESCRIPTION

Format IDE logical drive 0 or logical drive 1.
Maximum track number = 255

When formatting logical drive 0 it will ask for writing the BOOT loader.
Formatting other partitions can be done
by swapping the partitions with FDRIVES.

SEE ALSO
FDRIVES, PLIST

PLIST - Version 1.1

Show IDE drives information.

SYNTAX

PLIST

DESCRIPTION

It will show all the following data on the IDE device:

PART number VOL Name VOL Number Description

Then the program allows updating of this information.

"SPACE Bar - Exit, <CR> - Change Description, (M)ount, (K)ill, (U)ndo ? "

Note: A <CR> will leave the entry unchanged
Enter a single space to blank VOLNAM or Description

The program will check if de IDE driver is loaded.

RAMDSK

CPU09RAM memory page test.

SYNTAX

RAMDSK

DESCRIPTION

RAMDSK - Will show the switch setting.
Then the program will check if all pages are unique.
It will write and read each page full with a unique code.

```
+++RAMDSK
Switch setting: CB
Write chip: 01234567
Read  chip: 01234567
+++
```

Any RAMDSK Error looks like:

```
Read  chip: 012
Error at:
WRITE READ PAGE Chip
0803  0800 0003 U6
Read  chip: 34567
```

NOTE: It use FLEX calls and return to FLEX.

SEE ALSO

RAMDSK3, RDSKTST

RAMDSK3

CPU09RAM memory page test.

SYNTAX

RAMDSK3

DESCRIPTION

RAMDSK - Will show the switch setting.
The first run will check if all pages are unique.
The second one will write all 0000 to the ram,
you can change the 0000 at $0142.
The third one will write all FFFF to the ram,
you can change the FFFF at $0157.

```
+++RAMDSK3
Switch setting: CB
   > Page select test <
Write chip: 01234567
Read  chip: 01234567
   > Write/read $0000 <
Write chip: 01234567
Read  chip: 01234567
   > Write/read $FFFF <
Write chip: 01234567
Read  chip: 01234567
+++
```

Any RAMDSK3 Error looks like:

```
Read  chip: 012
Error at:
WRITE READ PAGE Chip
0803  0800 0003 U6
Read  chip: 34567
```

NOTE: It use FLEX calls and return to FLEX.

SEE ALSO
RAMDSK, RDSKTST

RBRDSK – Version 1.0

CPU09RAM disk memory test.

SYNTAX

RBRDSK

DESCRIPTION

This is a rotating bit memory test.
Each good test will print '+' on the screen.

Any RBRDSK Error looks like: Error at: 48CB ECAA

48CB is the address stored at $ED00 and $ED01.
ECAA is the address in the RAM space EC00-EDFF.

NOTE: It use FLEX calls and return to FLEX.

SEE AlSO

RBRDSKM

RBRDSKM – Version 1.0

CPU09RAM memory test.

SYNTAX

RBRDSKM

DESCRIPTION

This is a rotating bit memory test.
Each good test will print '+' on the screen.

Any RBRDSKM Error looks like: Error at: 48CB ECAA

48CB is the address stored at $ED00 and $ED01.
ECAA is the address in the RAM space EC00-EDFF.

NOTE: It use MONITOR calls and ends in the MONITOR.

SEE ALSO

RBRDSK

RDSKTST

CPU09RAM memory page test.

SYNTAX

RDSKTST

DESCRIPTION

RDSKTST - Will show the switch setting.
The first run will check if all pages are unique.
The second one will write all 0000 to the ram,
you can change the 0000 at $0142.
The third one will write all FFFF to the ram,
you can change the FFFF at $0157.

```
+++RDSKTST
Switch setting: CB
   > Page select test <
Write chip: 01234567
Read  chip: 01234567
   > Write/read $0000 <
Write chip: 01234567
Read  chip: 01234567
   > Write/read $FFFF <
Write chip: 01234567
Read  chip: 01234567
cmi-bug 1.5 - 60k

>
```

Any RDSKTST Error looks like:

```
Read  chip: 012
Error at:
WRITE READ PAGE Chip
0803  0800 0003 U6
Read  chip: 34567
```

NOTE: It use MONITOR calls and ends in the MONITOR.

SEE ALSO

RAMDSK, RAMDISK3

SET

Show - change floppy and virtual drives number.

SYNTAX

```
      SET <options>
```

DESCRIPTION

Command is added by loading VIRTUAL driver.
Command for resetting drive type and local drive number for each of the Floppy and Virtual drives.

```
 SET 0=V0 1=D0 2=D1 3=D2 ?
 NOTE ='S ,COMMAS, & SPACES ARE OPTIONAL AND IGNORED
 WILL EQUATE FLEX DRIVE 0 TO VIRTUAL DRIVE 0
                        1 TO REGULAR DISK DRIVE 0
                        3 TO REGULAR DISK DRIVE 1
                        4 TO REGULAR DISK DRIVE 2
 / - WILL SUPPRESS PRINT OF CURRENT STATUS

 < - WILL CLEAN UP THE VIRTUAL PROGRAM
      EG RESTORE MEMORY FOR FLEX.

 NOTE - SCAN STOPS AT FIRST ENCOUNTER OF <,/,<CR>

 "S" AND "W" WILL ASSIGN SYSTEM AND WORK DRIVES

 EG.
 IF S APPEARS BEFORE DISK ASSIGNMENT WILL SET SYS TO ALL
 IF S APPEARS AFTER DISK ASSIGNMENT WILL SET SYS TO THAT DRV
 SAME FOR W - WORK ASSIGNMENT

 +++SET S 0=V0
    WILL EQUATE THE SYSTEM DRIVE TO "ALL" AND
    EQUATE FLEX DRIVE 0 TO VIRTUAL DRIVE 0 AND PRINT

 +++SET 0=V0 S 3=W
    WILL EQUATE THE VIRTUAL DRIVE TO FLEX DRV0 AND
    EQUATE THE WORK DRIVE TO PREVIOUSLY DEFINED  FLEX #3 WITH NO PRINT

 +++SET
    WILL RESET THE PROCESSOR DP REGISTER TO 0 AND PRINT
```

NOTE:

```
     WHEN USING THE IDE DRIVER SET WILL SHOW A H0, H1 DRIVE
     DON'T USE SET TO CHANGE THE Hx DRIVES.
     THE VIRTUAL DISK WILL BE PUT ON THE HIGHEST D NUMBER.
     IT WILL ALSO IGNORE THE 2 DRIVES DIPSWITCH SETTING.
     DON'T USE FDRIVES TO CHANGE THE Dx AND OR V0 DRIVES AFTER
     THE VIRTUAL DRIVER IS LOADED.
```

SEE ALSO

VIRTUAL

VDISK - Version 9.7

FLEX RAM disk formatter.

SYNTAX

VDISK

DESCRIPTION

When the virtual disk driver is loaded it can format the virtual disk(s).
If there is only one virtual drive it will format V0.
If there are 2 virtual drives it will ask the number to format:

0 = format V0
1 = format V1
A = format both

If the Format protection switch SW2-4 on the RAM card is on
VDISK will tell that, to overrule the protection type: Yes

If the Batter low switch SW1-1 is on or the 'UPS RAM' gives a low signal
VDISK will start automatically after loading the VIRTUAL driver.

NOTE:
The size of the Disk(s) will be set
depending on the RAM card DIP switch settings by VIRTUAL.

SEE ALSO
VIRTUAL

VIRTUAL - Version 9.7

FLEX Virtual Disk driver.

SYNTAX

VIRTUAL <options>

DESCRIPTION

VIRTUAL will scan the RAM card DIP switch settings
and set the data for VDISK.

+++VIRTUAL 3=W
Sets the virtual drive on FLEX drive 3 as work drive .

After first time loading VIRTUAL de drive(s) needs to be formatted, when removing virtual with ‘SET <’ or a WARM FLEX boot only VIRTUAL has to be loaded again.

Any COLD FLEX boot with the SYSTEM power on or any COLD FLEX boot on a RAM card with the ‘UPS RAM’ needs only a VIRTUAL reload.

If the Batter low switch SW1-1 is on or the ‘UPS RAM’ gives a low signal VDISK will start automatically after loading the VIRTUAL driver.

NOTE: On all non IDE disk drivers Virtual set if SW2-2 = ON:
Boot, 0=D0 1=D1 2=V0 3=V1

VIRTUAL will overrule the RAM DIP switch SW2-2 setting
if the IDE disk driver is loaded:

Boot from IDE, 0=H0 1=H1 2=D2 3=V0
Boot from FLP, 0=D0 1=V0 2=H0 3=H1

SEE ALSO
SET, VDISK