# FLEX CPU09CMI Utilities

- 2. BOOTON
- 3. CMILINK
- 4. CMISTEP
- 5. FDRIVES
- 6. IDEFMT
- 7. PLIST
- 8. RAMDSK
- 9. RAMDSK3
- 10. RBRDSK
- 11. RBRDSKM
- 12. RDSKTST
- 13. SET
- 14. VDISK
- 15. VIRTUAL

#### 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 \text{ 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 \text{ 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:
      When FLEX boot from IDE and there is no floppy in drive 0
      or no image loaded on Gotek 0,
      the device will not give a ready signal the cable will be type 5.
      Use BOOTON to check and change the cable type.
      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 <file spec>

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.

+++CMILINK O.FLEXIDE.SYS

+++CMILINK 2.FLEXFLP.SYS

### 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_ide

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
 fdrives<cr>

hard drive parameters

fdrives n t d p n = logical drive

t = type W or F

d = physical strapped drive
p = partition on hard drive

floppy drive parameters

fdrives n + d n = logical drive

t = type W or F

d = physical strapped drive

SEE ALSO

### IDEFMT - Version 5.3

FLEX IDE Disk formatter.

SYNTAX

IDEFMT, <drive>

DESCRIPTION

Format IDE logical drive.

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

## 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 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</pre>

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  $^\prime+^\prime$  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 - 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 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.

>

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 and type.

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 DRVO 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 DISK DRIVER, SET WILL SHOW A HO, H1 DRIVE DON'T USE SET TO CHANGE THE Hx DRIVES.

THE VIRTUAL DISK WILL BE PUT ON THE HIGHEST D NUMBER.

DON'T USE FDRIVES TO CHANGE THE Dx AND OR VO 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  ${\tt V0}$ .

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 Battery 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 by VIRTUAL depending on the RAM card DIP switch settings.

SEE ALSO

VIRTUAL

#### VIRTUAL - Version 9.7

FLEX Virtual Disk driver.

SYNTAX

VIRTUAL [, <drive>=W][, <drive>=S]

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 after a SYSTEM power off but with a RAM card 'UPS RAM' needs only a VIRTUAL reload.

If the Battery 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 if SW2-2 = ON Virtual set:

Boot, 0=D0 1=D1 2=V0 3=V1

VIRTUAL will overrule the RAM DIP switch SW2-2 status 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