

CP/M+ For The Einstein TC01 Plus "Transfer"

An Application

For Reading the Directory of Files on a MS/DOS 720kb Floppy
in an Einstein Drive

CPMLOAD running on the Einstein's screen

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          ***  EINSTEIN  ***
TATUNG/XtalDOS 1.11          (C) 1983 1984
◇:CPMLOAD

CP/M loader v1.◇

  BIOS3      SPR  EC00  0B00
  BDO33      SPR  CD00  1F00

  51K TPA

Einstein CP/M 3 BIOS D3.1
A>
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The CP/M+ operating system for the Einstein was developed by Duncan Elvin some years ago. It does not require its own boot disk but loads on top of Xtal DOS.

The files CPMLOAD.COM, CPM3.SYS and CPP.COM need to be added to an XTAL boot disk. After booting into Xtal DOS type CPMLOAD <ENTER> at the Xtal Dos prompt and the CP/M+ operating system will load and run on the Einstein TC01. These files can be found in a zip archive 3cpm3.zip on the Tatung Einstein Computer Website.

CP/M+ for the Einstein was not widely distributed or has been reported to be used by many Einstein enthusiasts so faults and bugs could be encountered when running some programs under this system. A major setback for many established Einstein users was that it would not run Xtal's standard Xbas basic. Bbcbasic and all other Einstein software I have used,

including the serial transfer utility EinTrans, have worked as normal so far under CP/M+. The advantages: CPM plus files generic for the z80 processor can be run in the Einstein.

Duncan Elvin did not provide a CP/M+ utility disk as such but provided files (including source code) from a folder on his PC that he used to develop the system for the Einstein. These are as sent and in the bios3eug.zip archive. The folder does not contain the support files expected to go with the CP/M+ system. These can found in the CP/M 3.0 distribution zip archive for the YAZE emulator.

Xtal's "backup.com" and "copy.com" will run under CP/M+ but Xtal's labels of - 0:, 1:, 2:, and 3: for floppy drives still has to be used and not CP/M+'s A:, B:, C:, and D:. These two Xtal programs can replace the need for CP/M's "pip.com".

The "DEL" key will not work with the CP/M+ operating system and the "SHIFT" together with the "LEFT & RIGHT" arrow keys has to be used to position the cursor before over typing character corrections.

CP/M+ will run on Einstein TC01's with both MOS 1.2 or 1.21 ROM eproms installed.

The CP/M+ "TRANSFER.COM" utility will only run with MOS 1.21 and not a MOS 1.2 ROM chip installed. See next page.

TRANSFER.COM

Requires CP/M+ running in the Einstein and MOS 1.21. Transfer.com will read the file directory of a 3.5" MS/DOS 720kb floppy in an Einstein drive. Sub MS/DOS directories can be opened and read. Files can then be transferred to an Xtal DOS formatted floppy in another Einstein drive. Files can also be transferred from an Xtal floppy to the MS/DOS floppy.

This utility has been made to work for the Einstein TC01 by Duncan Elvin. Professional software engineers who write programs voluntary can only create programs for the hardware they have access to; so, unlike a company writing propriety software, they can't be expected to have the programs they give out for free to run in all Einstein environments. Duncan's Einstein was installed with MOS 1.21 and unfortunately transfer.com as it is will not work with Einsteins installed with MOS 1.2.

Duncan has via correspondence mentioned that the source code files he has provided could be altered so a "TRANSFER.COM" version would run with a 1.2 MOS installed in an Einstein, also that it might be possible for a program adaptation to be made which will run under XTAL DOS 2.05 alone without CP/M+. The source code files used to create TRANSFER.COM are in the TRANS.zip archive provided by Duncan Elvin.

TRANSFER.COM Opened on the Einstein's Screen showing menu options

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A>TRANSFER
TRANSFER -   CP/M <--> MSDOS
  File Conversion Utility
  ----- Einstein Version -----
  Modified for Einstein with MOS 1.21
           by D.Elvin 1994

Which Drive is the MS-DOS Disk in? D:
Which drive is the  CP/M  Disk in? A:

TRANSFER - vers 1.10
  CP/M= A:   MS-DOS= D:
  Path == '2
  1. Transfer File:      CP/M  >> MS-DOS
  2. Transfer File:      MS-DOS >> CP/M
  3. Directory of       MS-DOS Disk
  4. Allocation Map     MS-DOS Disk
  5. Directory of       CP/M  Disk
  6. Erase File         MS-DOS Disk
  7. Boot Sector        MS-DOS Disk
  8. Open MS-DOS SubDirectory
  9. Quit
  Enter Your Selection?

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Comment

The potential of the TRANSFER.COM & CP/M+ to transfer files to MS storage media seems to have been overlooked by many Einstein users in the past. It was available long before Ste Ruddy's Eintrans and the more recent CPCDiskXP PC software. An upgrade for Einstein's MOS may have been more difficult to obtain then. CP/M Plus may have been dismissed by Einstein users as XBAS basic programs they had written and accumulated would not run under the CP/M Plus operating system. Not mentioned by the few Einstein owners that had or new of CP/M Plus was that CP/M Plus's TRANSFER.COM could be used to transfer Xtal DOS programs to an Xtal boot disk and then run under Xtal DOS at a reboot, To have the ability for a stand alone Einstein to read a MS/DOS 720k 3 1/2 inch floppy directories and sub directories and the ability to transfer to Einstein storage media was good reason alone to use CP/M Plus in my opinion.

PC/Einstein serial transfer programs such as EinTrans may be more convenient to use but for an Einstein isolated beyond the reach of a serial cable link TRANSFER.COM & CP/M+ does give the use of Einstein programs on a MS/DOS floppy. Copying files to a PC hard drive for storage and mailing Einstein files to others as email attachments are other advantages.

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