## Einstein Computer Club E-Mails

May 2005

## In PDF Documents

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Einstein Club E-mails and other News Selected and Edited By Chris Coxall

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## CONTENTS

	Page
E-mail invitation to the TATUNG EINSTEIN ONLINE COMPUTER CLUB	3
Contributing Article Content 26 May 2005 20:11:03	4
Disk Image File Extraction 26 May 2005 21:49:12	8
Einstein ROM Advertisement 25 May 2005 14:47:22	9
Upgrading Einstein ROMS	10
Reply by Paul Bunyan to Upgrading Einstein ROMS 30 May 2005	11

#### THIS DOCUMENT

This document holds nothing more than a journal of e-mails sent to the Einstein club. There is added comment and graphics. Acrobat Reader is required to view the pages on the computer screen or for printing selected pages, or the entire document to hardcopy using the home computer/printer. The page layout is designed for A5 size hard copy.

## Invite to Join TATUNG EINSTEIN ONLINE COMPUTER CLUB

You are receiving this e-mail as in one way or another you have contacted the Tatung Einstein Web Site either by signing the site's guest book or by e-mailing me via the Site. Some of you have been subscribers or even article contributors to the now out of publication Einstein Magazine.

A web site does not act as good substitute for a magazine. For those that were regular letter writers and/or article contributors to the magazine and would still like to make comment or other informational contributions to an Einstein forum I've set up the online Einstein Club or Group Site at "http://clubs.wanadoo.co.uk/groups/einsteinclub".

Managing the Web Site takes up quite a lot of my time and there is not enough of my time to prepare and keep the site pages updated with a backlog of information I could create. Much of the e-mail contact via the site to me personally would be of interest to Einstein enthusiasts in general and other group members could have the answers I don't. Individual queries and responses from others could be of value and interest to all so please consider first e-mialing the group before e-mailing me personally. I will be of course the recipient e-mails to the group and can respond to those that are directed to me and my response could be of interest to other members.

I must say I am viewing the internet based club some what cautiously. Although I see a need for it I know little how to manage it at the moment. My setting up the club is conditional to that of it more or less running its self and requiring little managerial input from me, so there will be no additional work load I have no time for. If some one else feels they have more time and experience to run the club please contact me to consider taking over a more managerial role.

Additional features of the club site. Advertising for sales and wanted and file uploads and downloads.

Regards to ALL Chris Coxall

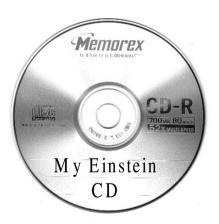
# File Club-1.pdf May 2005 Einstein Club E-mails Contributing Article Content

For those who would still want to contribute article material to the Einstein scene.

With a club site being able in a more general way for Einey people to keep in contact with each other I would like to put forward some ideas that I have discussed with former Einstein Magazine subscribers in the way Einstein related information can be preserved and future development can be shared.

#### Your Own Einstein CD

Every now and then I make a back up CD-ROM of the web sites I have and there is a lot of spare space so anything Einstein related I have gets put on to it. It holds drafted out ideas for future Einstein development, scanned in graphic files of Einstein manuals, articles, text files of information sent by others and Einstein Disk Images also programs. PC applications I use for Einstein publications are also added just to fill up space.



They haven't been made in any organized way except to hastily add text files for introducing folder content (that's if I remembered to do so). The text files also hold some of my ramblings. Very rudimentary sketched out ideas for what might end up on the web site or for future Einstein development. It was easy to make a copy CD to send to a few others. They were not intended for general distribution but in this rough and ready way Einstein info gets preserved and into the hands of others.

Some of those that received my web site back up CD have responded by sending me there own stored Einstein related material on a CD. This is a very good way to get Einstein information saved into the hands of those

File Club-1.pdf May 2005 Einstein Club E-mails who would like to be still active in sharing and helping others with future Einstein development.

I think I can safely say I can find the time to make up to ten copies of the Einstein web site back CD for others. If you have received one please feel free to make copies for others. From the daisy chain letter distribution method of rough and ready stored Einstein info some one may in the future make up an official "Tatung Einstein CD".



If you have been an article contributor to the former "Einstein Magazine" or even an Editor and have stored electronically contributions in DTP or txt files and can't create a CD please get the information to me anyway you can or to some one else who can back it up to CD.

#### Article Contributions

I was always of the opinion that the publication and distribution of EM was too much for one person and Ted Clerkwell and Tony Adams as Editors were the exceptions in being able to edit the magazine for such long periods. Finding the time to manage the web site is hard enough but unlike a magazine I' m not restricted by dead lines and I can update the site as to when the other essentials of living permit. So, no great pressure on me.

There is nothing that can replace that hard copy magazine that dropped through the letter box but hard copy distribution is expensive and rather dated now for small scale publications.

There is though a way magazine type pages can be created and printed out on the home computer/printer. With a Desk Top Publisher software and skills, created article pages can be printed to a \*.pdf document with the freeware "Cute PDF Printer" download at "http://www.acrosoftware.com/

Products/CutePDF/writer.asp". The \*.pdf documents can be sent over the internet and by the end user read on the computer screen or printed to hard copy.

This Spectrum site "http://www.woodcock88.freeserve.co.uk/html/magazine.html" has ten A5 format magazines that are well laid out and professionally done using this method but the Editor's time seems to have been stretched and the present magazine says future issues will not be published for a while.

I would not wish to recommend to any one to take on an online magazine dedicated to dead lines unless they are really tough. I do intend though, to use the method of creating pdf document pages for single subject articles for downloading from the web site and for uploading to this club site in future.

I am myself prepared to except Einstein related pdf documents from others for downloading from off the web. But please completed packaged up pdf documents only. Do not expect as another has done that material can be sent in as W ord 7 files or some other format and I would put the content into a DTP layout and print to a pdf file. The pdf files should be final documents in themselves the content and layout the responsibility of the creator with out the need for further editing from me. All I need in addition is a sentence or two for the web site to describe the content for those who would wish to download. This way the time and effort required from me will be minimal and manageable.

Any type of Einstein related document would be acceptable but useful information regarding the adaptation and software manipulation of the TC01's hardware would get a special mention on my main web site.

The format for the documents I recommend should be for A5 size and not multi column. News paper type columns look great on hard copy but on screen it means scrolling up and down the page to read.

The desk top publisher software I used to use was Serif Page Plus 5 a freebee which came with computer magazine cover CDs. From the Serif web site I' ve recently down loaded their latest freeware Serif PagePlus

program. The files they create are not compatible with each other. A great pity. The latest PagePlus is free and available now, so my I suggest that this be the official Einstein Club DTP. The idea being that single subject articles created with Serif Page Plus by various people could later be edited into compendium booklet.

As I mentioned in the club's invite e-mail I can never find the time to keep the web site pages updated with a backlog of information I could create. Two essential documents I need to do are a listing of the Einstein's MOS machine calls and example program listing to what they do. The other is how to use the TC01's user port. The web site is meant to be an Einstein resource centre providing this information. If anyone has this information and can put it into a presentable pdf file please help me out.

### Creating Your Own Einstein Web Site.

A web page of your own for a one off project. A presentable web page of useful information need not be complex or hard to do. A text file will load into a browser as a web page. Adding photos and scanned in diagrams is not difficult to learn. Word processors and DTP software can now have simple web page creating features i.e. Lotus Word Pro 97. There is also the freeware Serif WebPage Plus.

Free web site space can be had from most ISPs. Web sites once created do not seem to go away by the neglect of the owner. I recently found I had created a web site two years ago by mistake. I didn't know I had it. So a web site once created need not be an on going responsibility. It can be left and forgotten by its creator but still giving out useful information to those who can find it. It would be easy for me to add a link to such a site and save me creating a web page for that information myself.

I hope the above will be useful for those original "Einstein User Group" members who recall the now unpublished magazine and still have an itch to continue on making contributions to the Einstein scene.

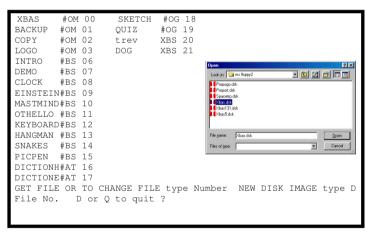
Best Regards to All Chris Coxall

## Disk Image File Extraction

In the up loaded zip archive "DSK\_F\_y.zip" is a windows PC program written by me. It will open, read the directory and extract individual files from Einstein disk images.

Einextract a previous program written by me, which can be downloaded from "http://members.lycos.co.uk/albertstc01/extract/extract.htm", will also extract files from Einstein disk images but only from standard single side 40 tracks per side format. DISK\_F\_y.exe will extract from images with different formats but unlike Einextract it does not yet use windows dialog boxes but runs in a window on the PC in a way you would expect a basic program to be displayed and run on the Einstein.

I should say the program is still under development but finding time myself to get it finished seems impossible at the moment. In its present stage it does work and could be of use to others. A



useful feature is when the screen displays a disk image directory pressing <Ctrl> then <Tab> copies the text to clipboard.

There is another good reason to make this program available as it is. For those that can remember the days before the IBM computer and Windows were affordable and available to most, computer owners had 8bit computers that booted up into there own home basic. In those days software was something you either wrote yourself or a listing you typed in from a magazine. Every one was in one way another a software writer.

Then along came windows and only really clever people would write software. I' ve written this program with "Bbcbasic for Windows" using basic-basic listing just to show that the type of basic programming used in the old computers can still be used in the modern windows environment.

I must warn I am not a proficient program writer just amateur so if you use this program it is at your own risk.

In the DSK\_F\_y zip archive the DISK\_F\_y.exe is the program and e\_listing.txt is the BBCbasic For Windows listing. Assessment.txt is the way I started to keep track of the program I was creating as there was lots complex parts to it to keep in mind. This might be helpful to some one who would like to write an extraction program. Diskimage.txt is a description of the extended disk image anatomy essential to know for creating the program.

A very good free demo of "Bbcbasic for Windows" can be downloaded from "http://www.rtrussell.co.uk/".

Have Fun Chris Coxall

25 May 2005 14:47:22

A New Classified Ad has been placed in the "Einstein Computer Club" Club at Wanadoo Clubs by Paul Bunyan.



Item Name: [For Sale] Replacement EPROMs (v1.21)

Description: Anybody needs one (even as an upgrade) then please

contact me!

paul dot bunyan at ntlworld dot com

Price Details: 0

Web Location: http://clubs.wanadoo.co.uk/ads/

ads.cfm?GID=2932594&AdID=1

## Upgrading Einstein ROMS



First! Many thanks to Paul Bunyan for making MOS 1.21 ROMs and upgrades available to all.

Things I don't know. How to make an Einey ROM? I'm not talking here of flashing the EPROM IC which Paul can do but of writing the code.

I've used an assembler and written machine code programs for the Einstein but what are the basic principles for writing or adding our own routines to the 'machine operating system'? How can a machine call be made that knows where the new routine is in MOS and then what does it do with it for it to run in RAM?

I've bought many discounted ex library books on micro computer electronics and programming but none explain of give direction to what the primary ROM does except to say that it initially boots up the computer.

In the past, unless some one had the hard ware resources, to tinker and dabble with the MOS was a no go area. This is still true today for the real Einstein but for emulation on the PC, MOS in a virtual ROM is just a file of Z80 code found in a folder for the MESS software. Changing or adding routines to the ROM file would, as far as I can see, be a matter of harmless trial and error. By using the emulator there would be no transfer to firm ware needed to test an upgrade idea.

Writing an Einey ROM for the MESS emulator should be as uncomplicated as writing an assembly program in the Einstein but what are the rules and principles to be followed? I have made a disassembly of the ROM but not knowing what it does and how it works its structure of component routines is hard to decipher. Can anybody explain in lay mans terms?

Regards to All Chris Coxall

## Re. Upgrading Einstein ROMS

Message #2 of 2: Date Posted: 30 May 2005 19:47:33 by Paul Bunyan

Author wrote:

[snip]

> Can anybody explain in lay mans terms?

Chris,

It's a black art which needs intimate knowledge of the hardware on which the code will run, as well as a thorough grasp of the specific op-codes for that CPU type.

Fortunately the Z80 is well documented. I don't know how well documented the Einstein hardware is.

I used to write code for Z80 based industrial kit and it was imperative to include null code that acted as notation for what each chunk of code did. I doubt the Einy ROM has has luxury of space that we had then.

I haven't (as yet) looked at the code in an Einy ROM but if I get time (moving house in the next couple of weeks!) I'll let you know what I find.

Regards Paul Bunyan

Coment by Chris Coxall

Thanks again Paul.

I do have scanned in image files of Einstein technical manuals stored on CD. Zipped size 34.7mb and 10.1mb. One lists the machine calls RST 08H instruction followed by a routine number in hex. How does this find the desired routine in ROM? If it does say its in technical jargon I don't understand. As you say its a black art and their secrets are not meant to be given up easily.

#### Back Page

Einstein Online Computer Club
The club site is to provide Einstein related input from visitors to the Tatung Einstein Site.

- **ü** A message board can be used for sharing information with other site visitors.
- **ü** Members can upload and download files.
- **ü** Advertising Einstein computers and equipment for sale and wanted can be done.

Free membership signup is required.

If you have not been to Clubs before you will need to enter your email address and a few details to register with the service. A message will be sent to your email account with simple instructions on how to complete your registration. As soon as you reply to this message you will be able to post messages and add information to your new Club.

Einstein Club http://clubs.wanadoo.co.uk/groups/einsteinclub

Web Sites

Original Site

http://members.lycos.co.uk/albertstc01/

Mirror Full Page No Advertiseing

http://mysite.wanadoo-members.co.uk/retrocomputer/

Einstein Emulation

http://mysite.wanadoo-members.co.uk/Einstein\_TC01