

Freier Journalist

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To
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Dear Craig,

Thank you very much for your letter of August 1 and the EXPLORER Software. Congratulations for that program, a very powerful tool for the TI 99/4A!

May be there is some confusion now caused by letter-crossing. So let me update my letter of July 29. This letter was written before I received the EXPLORER.

Enclosed are 5 PCB and 1 PCB completed. This one is changed, for using a 27128 for Grom 3 and 4. If you look, you will see these changes just left of the 74LS138 and at Pin 26 of the Eprom. I'm pleased to hear that you like these PCB together with your Grom-Library box. We have find out too these PCB's working fine in Grom Library, what the original Grom will not do. But we have solved the problems with the TI-Groms and the new EXPANDER 8 plus of Mechatronic is a true Grom Library, working with all TI-Moduls (we know). The only problem now is my original Extended-Basic. It works well if the P-Box is connected to the console. If not, it works only in Slot 0 and 1. It looks like some chattering on the Date-lines.

Also enclosed is a 2732 Eprom with my CONVERT-program. This is written in GP1 an fit my PCB in the Grom-part. This programm was my first try with GPL. It converts List-Files in Program-image. Due to the lengths of program-lines there are some restrictions: It is possible to convert lines longer then 80 characters, but no ~~x~~ Statement, variablename or string should be broken at the line end, and the next line is not allowed to start with a number. The M-Basic part will also interpret the MID and the ? function.

The PCB and the Convert-Eprom will here marketed by Elektronik-Service, Linning 37, D-4044 Kaarst 2, West Germany. The price of the PCB is something below 20.--DM (appr. 7.-\$) the price for the CONVERT-Eprom has not yet been fixed, but it should be around 60.--DM. But I also offer the distrubution for the USA to you.

Speaking of costs for the PCB I would like to make an exchange of the PCBs and the update-kit to the CorComp-Diskcontroller card as mentioned in my last letter. If ever possible I also would like to have an Eprom with the latest update of the Controller-software.

After the publication of my book TI 99/4A many GPL Dis- and Assembler appeared. Unfortunately this guy, who has written these programs I use, didn't want to give it away. But another quite good programs are sold by REIS Gmbh. Mr. Rainer Kienitz from these company will contact you for distributing these programs in the USA. If he doesn't, let me know.

I have forgotten something with the PCB's: It ist very easy to change the circuit to a GRAM. A User from Karlsruhe, Dr. Wolfgang Jüngst, has already done this. You can use the gates normally realise the decoding for the 27128 in a different connexion. Sorry, I have no layout, cause I'm waiting for my Grom-Card for the P-Box, which is compatible to the Grom Library of course and has a DSR in it.

Last night I finished the Ramdisk Software for the 128K-Ram-Expansion I mentioned in my last letter. This software features a copy-utility to copy files from and to a Disk-system. The problem was a mistake in all of the Disk-Controller DSR's (TI, Yours and Atronic, it looks like everybody has copied well): The STATUS of DIS/FIX-Files is not correct, it returns a 04 instead of the correct 00. The DSR fetches in the STATUS Routine the file descriptor byte, followed by an ANDI operation. The following jump JGT is right, but must be followed by a JEQ to the same label. Then the DSR works correct. May be, if you will update your DSR sometimes you should change it. The Ramdisk will now be available here in a short time. Retail price is 598.-DM (appr. 215.-\$).

Next new item ready is an Eprommer for the TI 99/4A fitting in the modulport (32K and X-Basic or E/A necessary, diskdrive recommended). You can burn the following Eproms: 2532, 2716,

2732, 2764 and 27128. Programming voltage is 21V or 25V. Modes are Read, Program, Verify and Blankcheck. You be able to handle only parts of the Eprom-Adress-room. Also included in the software is the handling of the buffer: Load it from VDP-Ram, CPU-Ram and Grom, load Assembler-Files (Compressed or not) and program-image files. Further you can edit the buffer. All features are software-controlled. The Eprommer will be manufactured by Mechatronic. Mr. Wilhelm from Mechatronic will contact you separatly concerning these news.

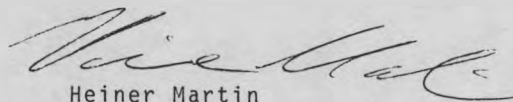
The Eprommer-Software let me ask for your Copy-protection. It is the best I have ever seen for the TI 99/4A. ^{is it} ~~it is~~ possible to get these protection for my software? This will save me of writing me own. As a prove, that I don't want only break your copy-protection and that I'm be able to write something like this too, I enclosed a disk with the program SUPERCOPY (E/A, Load and Run, Programm Name START, then put your Master in Drive 1 and a new Disk in drive 2 and press ENTER). CAUTION: This program is very dangerous for all software-distributor. I haven't relased it to anyone else except you. Please don't give any copy away!!!!!!! Though I have built in one feature for the future: Sectors with length-byte 00 will not copied correct. SCOPYDD is working with the Corcomp-Controller for DD/DS Diskettes like PC-Disks.

Last but not least I'm coming to my Monitor-Book. Your letter of August 1 has changed the minds of my publisher and the translation is now on order. So you can put it in your catalog. Suggested Retail price is 14.95\$. The distributor prices are as follows: 500 books 45% off (8.22\$ per book), 1000 57% off (6.43\$) and 2000 63% off (5.53\$). If you want to act as a sole distributor 2000 are minimum. All prices are plus shipping costs. If you need a confirmation for the prices or want to give an order please contact:

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Fremersbergstr. 1
D-7570 Baden-Baden

If you want the sole distribution, please hurry up.

Yours sincerely


Heiner Martin

STECKPLATINE TYP 2
für den TI 99/4A
MODULPORT

Die Bestückung:

Die Platine kann einmal ein Eprom 2764 bzw. ein 2732 aufnehmen, mit dem der am Modulport zur Verfügung stehende CPU-Adressenbereich von 6000H bis 7FFFH ausgefüllt wird. Wird nur dieser Bereich benötigt, muß von den LS-IC's nur das 74LS00 bestückt werden. Die anderen IC dienen der Simulation eines GROM. Das Eprom IC1, ein 2764 liegt auf der GROM-Adresse 6000H bis 7FFFH. Bestückt wird die Platine von der Seite, auf der nur ein L zu finden ist, die Seite mit dem Schriftzug "HM" ist die Lötseite.

Der Widerstand R bewirkt einen automatischen Reset des TI 99/4A beim Einsetzen des Moduls. Wird dieser Reset nicht gewünscht, so kann R weggelassen werden. Um eventuellen Kurzschlüssen vorzubeugen, sollten die Anschlußdrähte von R isoliert werden.

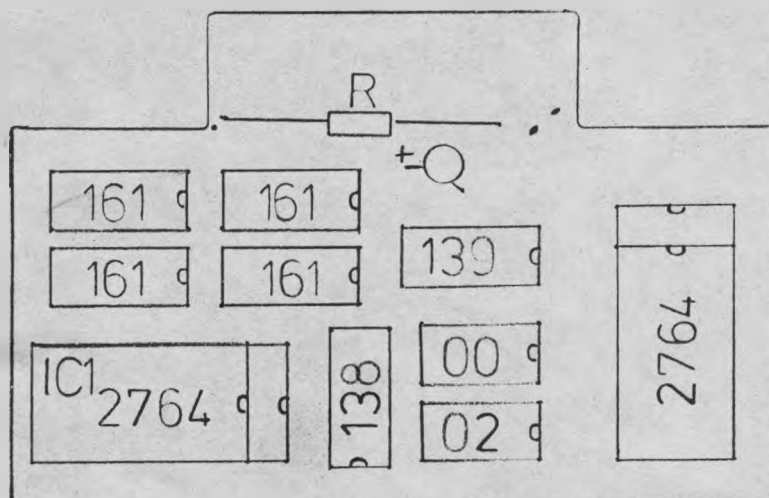
Die Platine ist durchverkupfert, d.h. gelötet werden die Bauteile nur auf der Seite, auf der der Schriftzug "HM" steht. Eingesteckt in den TI 99/4A wird die Platine mit der bestückten Seite nach oben!

Bedingt durch Fertigungstoleranzen kann es vorkommen, daß die Platine nur schwer in den Modulstecker des TI 99/4A geht. In diesem Falle glätten Sie bitte die Kanten an der Platine mit ein paar Feilstrichen.

Stückliste:

IC1, IC2 2764
IC3-10 74LS00, 74LS02, 74LS138,
74LS139 UND 4x74LS161
R 1500hm
C 47uF Tantal 6,3V

Bestückungsplan:



Allg. Hinweise:

Am Modulport des TI 99/4A steht der Speicherbereich 6000H bis 7FFFH zur Verfügung. In diesen Bereich können eigenständige Programme (z.B. Programmiersprachen wie Forth oder Spiele) gelegt werden. Ein Einsprung auf diesen Bereich ist vom Titelbild möglich. Dazu muß folgender Kopf gesetzt werden:

AORG 6000H	Start Modul
BYTE AAH	Ident. Byte
BYTE 1	Version Nummer
BYTE 1	Ermöglicht Einsprung
DATA 0	
DATA 0	
DATA PRGLNK	Programm-LINK

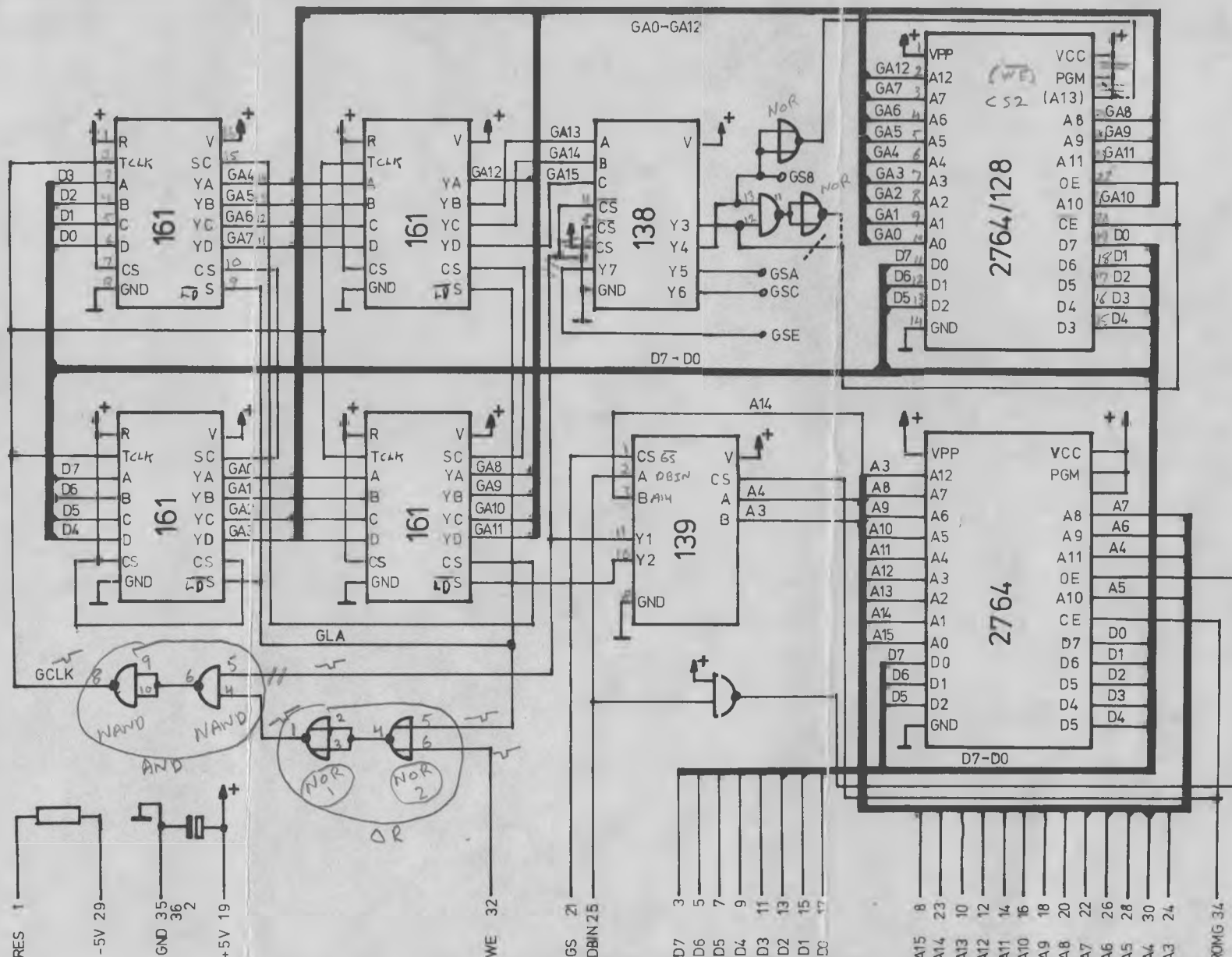
*

*

PRGLNK DATA PRGLK2	0 wenn kein 2. Programm vorhanden.
DATA ENTRY1	Einsprungsadresse
BYTE 4	Länge des Namens
TEXT 'TEST'	Name des Programms

Bei der Erstellung eines Maschinenprogramms für ein Modul ist natürlich zu beachten, daß die sonst beim TI 99/4A zur Verfügung stehenden Hilfsroutinen wie z.B. VMBW, KSCAN usw. nicht vorhanden sind.

Beim simulierten GROM muß der Kopf genauso gesetzt werden. In diesem GROM dürfen sich aber nur Daten oder Programme, die in der Programmiersprache GPL geschrieben sind, befinden. Weiter muß darauf hingewiesen werden, daß die Schaltung nur funktioniert, solange sich in der Konsole mindestens ein richtiges GROM befindet.



				Maßstab	
		Datum	Name		Modulplatine ROM/GROM für TI99/4A
Bezrb	29.3.85	H.Martin			
Ge r					
Nr m					
Zust	Anderung	Datum	Name		Blatt
					Bl