AccessionIndex: TCD-SCSS-T.20121208.060 Accession Date: 8-Dec-2012 Accession By: Prof.J.G.Byrne Object name: Texas Instruments Compact Computer 40 (CC-40) Vintage: c.1983 Synopsis: Early battery-operated portable PC, TMS70C20-based, in original packaging with documentation. S/N: 4720326.

Description:

The Texas Instruments Compact Computer 40 (CC-40) was an early battery-operated portable PC, introduced in Mar-1983, based on their TMS70C20 CPU. It had 6kB of RAM, 34kB of ROM that includes an enhanced form of BASIC, an interactive scientific calculator, and an instruction-level DEBUG debugger, and a 31-character 5 x 8 pixel LCD display that scrolled across 80-character lines. A built-in ROM-based "solid-state cartridge" unit allowed additional software to be loaded. External peripherals like a printer or a modem could be connected via a proprietary *Hexbus* interface, similar to the modern USB bus. Battery life was about 200 hours.

The TMS70C20 was a 40-pin 8-bit CMOS CPU, with 2kB of internal ROM and 128 bytes of internal RAM, clocked at 2.5MHz. The external RAM was composed of three HM6116LP-4 2k x 8 RAMs, somewhat speciously "expandable to 18kB" by desoldering two of those RAM chips, replacing them with two 8k x 8 HM6264 RAMs, and moving two jumpers ...

The *Wafertape* unit mentioned on the packaging was prototyped but proved unreliable and was never released, so there was no external read/write storage for user programs or data; this failure badly impacted on sales. Furthermore the CC-40 received poor reviews, with complaints about the keyboard, the lack of a file system or multitasking, the paucity of related software, and the fact that many calculators were more useful.

Accession Index	Object and Identification
TCD-SCSS-T.20121208.060.01	Texas Instruments Compact Computer 40 (CC-40).
	S/N: 4720326, Date Code: ATA2483, Assembled In: USA.
TCD-SCSS-T.20121208.060.02	Texas Instruments CC-40 packaging.
	Bar-code: 33317-01170
TCD-SCSS-V.20121208.868	Texas Instruments Compact Computer 40 User's Guide, ISBN
	0-89512-057-7, published by T.I., Dallas, Texas, 1983, Errata
	Sheet: Bridge Match-Pointing Program, instructions, p.1 of 1,
	Errata Sheet: Read This First, unpacking instructions, p.1 of 1.

The CC-40 documentation is properly part of the Literature category of this catalog, but is listed here too for convenience.



Figure 1: Texas Instruments CC-40 packaging front view



Figure 2: Texas Instruments CC-40 packaging rear view Bar-code: 33317-01170



Figure 3: Texas Instruments CC-40 in its packaging



Figure 4: Texas Instruments CC-40 three-quarter view



Figure 5: Texas Instruments CC-40 manufacturing label S/N: 4720326, Date Code: ATA2483, Assembled In: USA

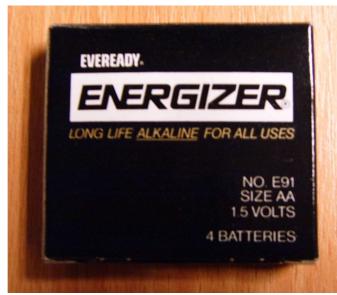


Figure 6: Texas Instruments CC-40 battery pack for 4 x AA 1.5V alkaline batteries

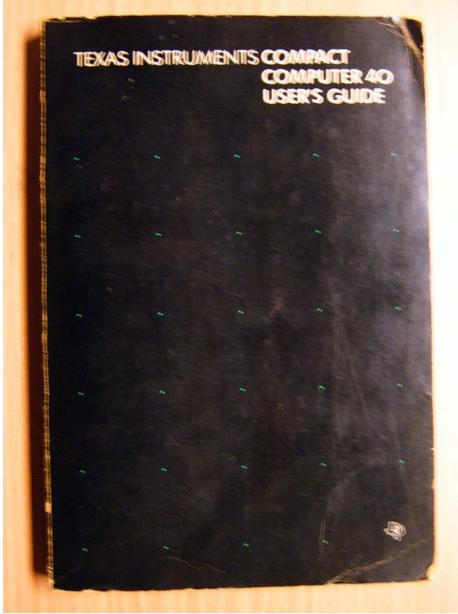


Figure 7: Texas Instruments CC-40 User's Guide

BRIDGE MATCH-POINTING PROGRAM 1 To start it running -Press DN, FN, 0, ENTER and you will see -NUMBER OF PAIRS = Key the number of pairs eg 12 followed by ENTER to yield -NUMBER OF PAIRS = 12 2 To enter the scores -You will be prompted for the twelve scores with for example NS=1 SCORE= in the score and then ENTER to load it, eg. if it was -450 then NS=1 SCORE=-450 If you make a mistake keying in a score press CLR and start again. If you press ENTER and an error message comes up simply press ENTER again and re-enter the score. 3. To read the results -These will be listed automatically after you have entered all the scores. A beep signifies that a new result is being displayed. Press ENTER to move on to the next result. To stop it running -Press BREAK and then OFF. 5 If something goes wrong -Press BREAK, then OFF and then start again.

Figure 8: Texas Instruments CC-40 Bridge Match-Pointing Program, instructions