

HHC 2025

After the TI-88...

TI tried again with these models!

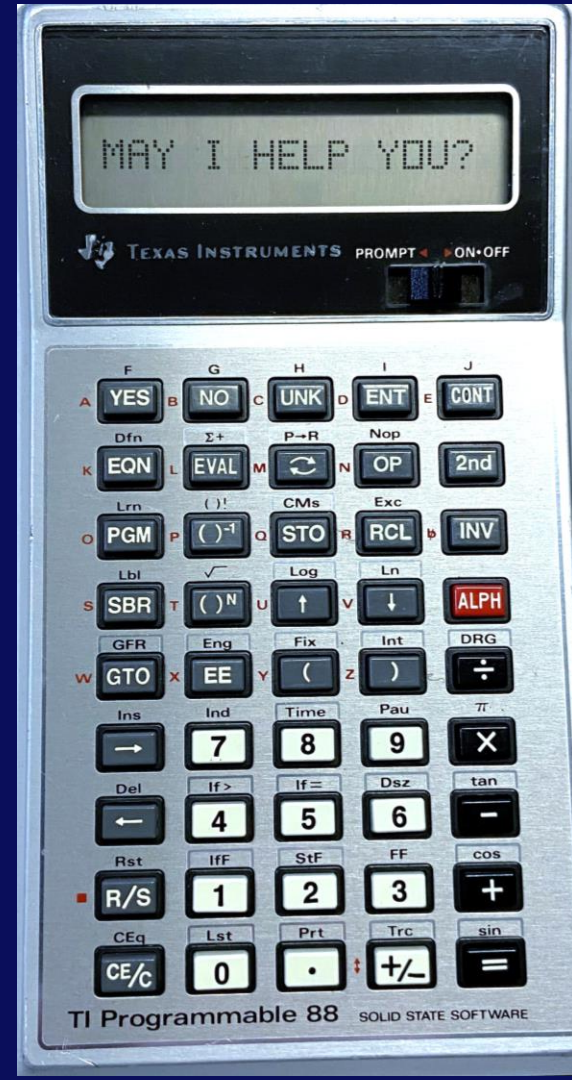
(Yes, more TI calculators !)

(Thanks for datamath.org for some pictures)

September 27-28, 2025

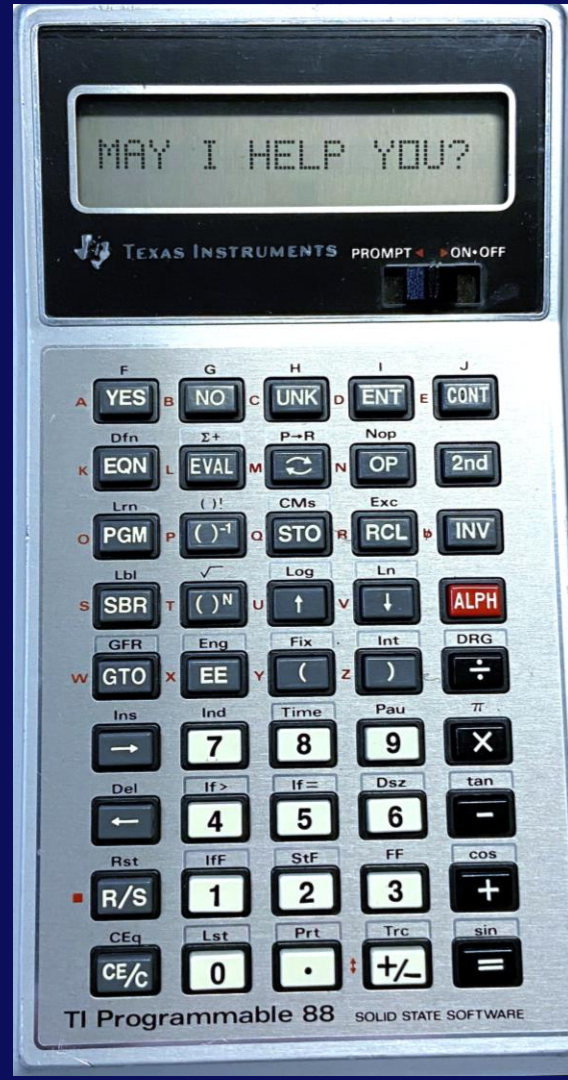
HHC 2025 – TI models after the TI-88

- In mid-to-late 1982, Texas Instruments killed the previously announced TI-88 calculator. This was the correct decision.
- See the 2022 HHC presentations.
- They did not, however exit the calculator business and they had several other options in development that came after the TI-88 cancellation.



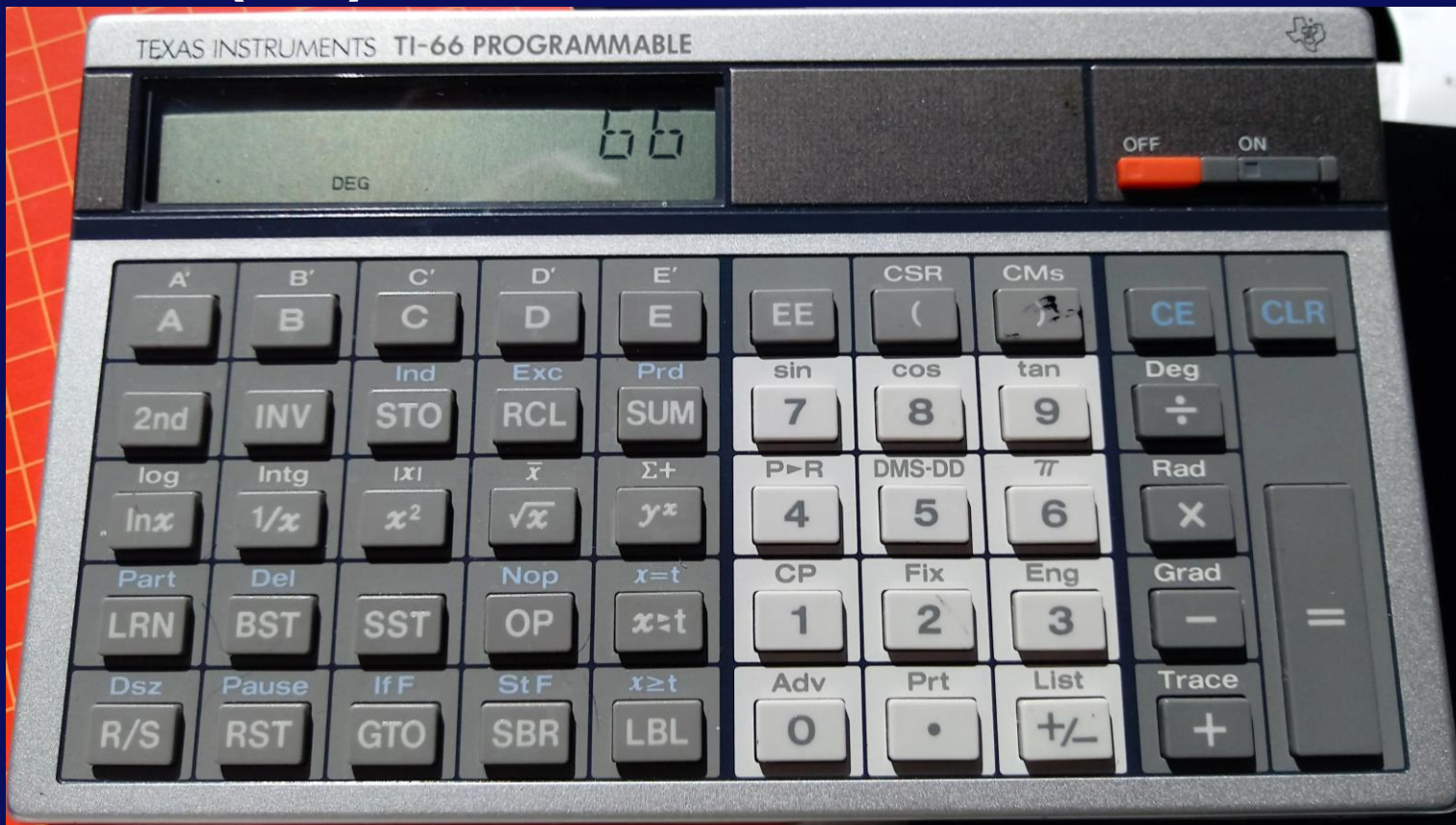
HHC 2025 – TI models after the TI-88

- TI decided “to launch a marketing program which is based on the fact that we believe keystroke calculators* are obsolete.” - Source: 9/10/1982 Herb Shanzer memo). * >\$100 in price.
- Read more about this here:
- www.datamath.org/Story/Project-X.htm
- The RM-1000 was to be the TI-88.
- Let's talk about one calculator and then RM-2000 and RM-3000 models today.



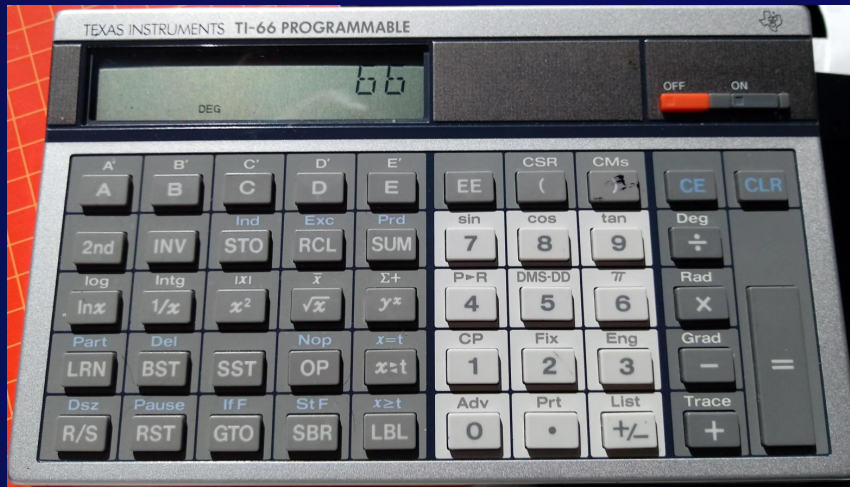
HHC 2025 – The TI-66

- The TI-66 (\$70) was introduced in late 1983.



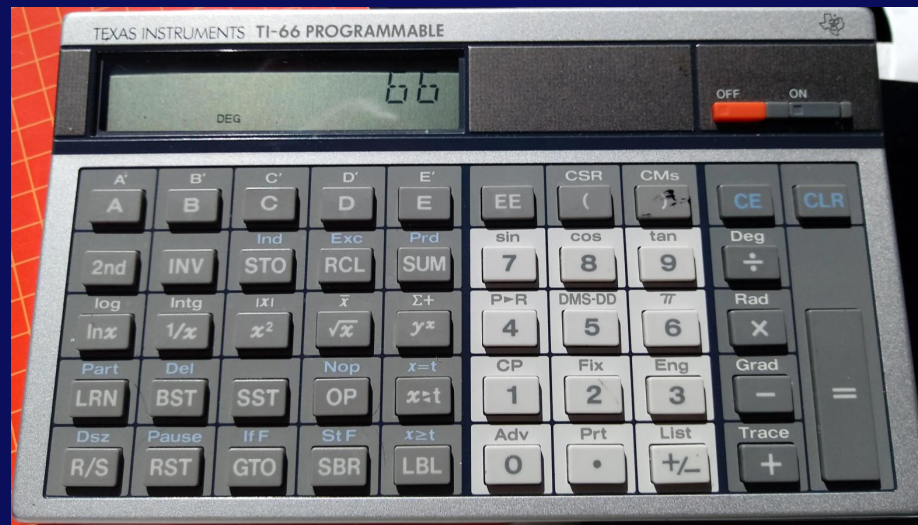
HHC 2025 – The TI-66

- Essentially this was a replacement for the TI-58C.
- Made by Toshiba. Had 512 program steps / 64 memories.
- Used a 12 segment LCD display. Optional printer. 16/line
- Slow! Can be sped up by replacing a resistor.
- hpmuseum.org/forum/thread-18537.html
- LBL A + 1 = GTO A: 210 in 60 sec
- HP-41 is 1063 in 60 sec.
- Slow - You may think it broken.
- Uses 2 LR44 batteries.
- 4 oz. Uses a 4-bit processor.



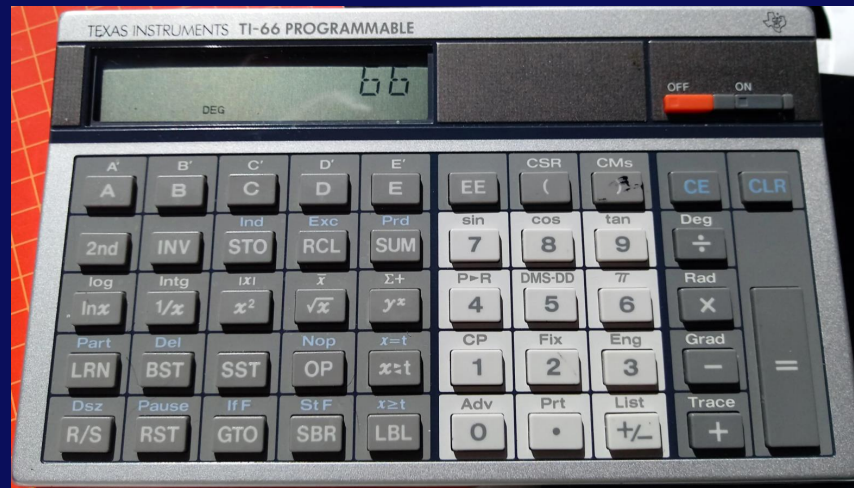
HHC 2025 – The TI-66

- Displays mnemonics rather than key codes for functions.
- Part function partitions by individual memory registers.
- Printer connects without removing battery pack.
- No solid-state rom modules.
- Possible to enter keys in LRN faster than they can be accepted.
- No “write over” editing.
- First reviewed in TI PPC Notes Jan/Feb 1984. Announced 5/83.
- Was to be another key above =
- Until VERY late in development.
- ENTER maybe? 😊



HHC 2025 – The TI-66

- CSR – clear statistics registers 01-06 and the “t” register.
- TI continued some of their mischief with this model.
- Sample Std Deviation is INV 2nd X-mean.
- OP 00-40 were available and required a list to remember.
 - And here's that list...



HHC 2025 – The TI-66

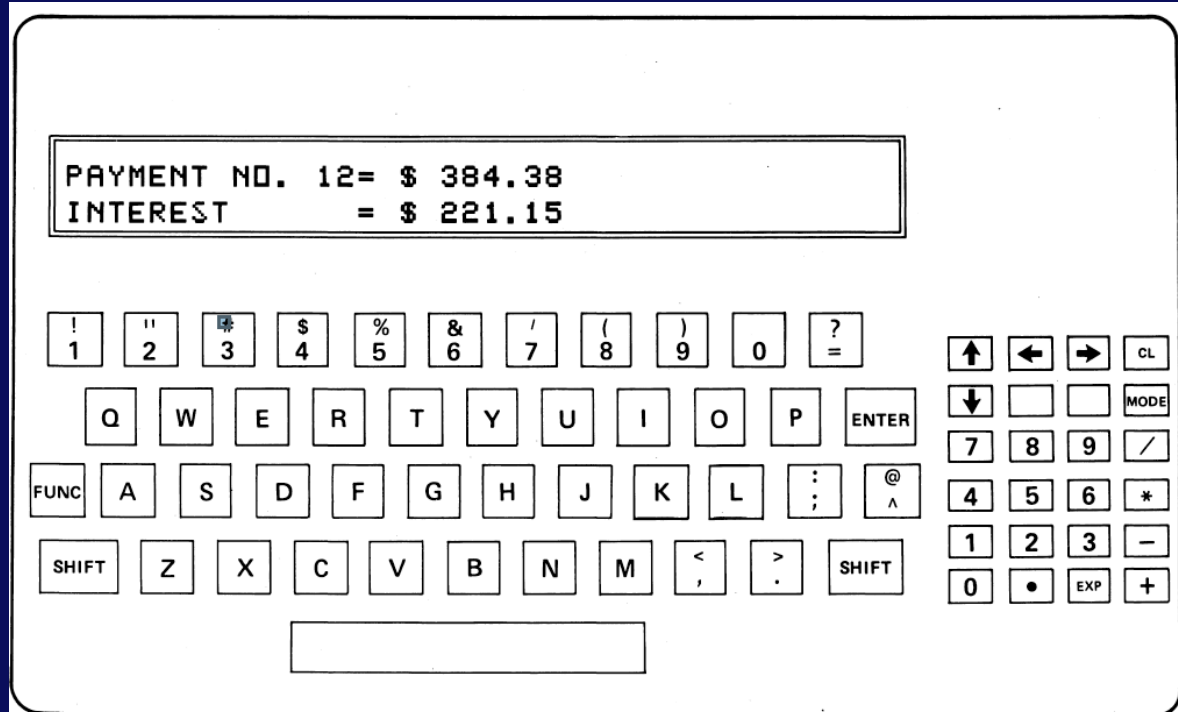
- OP 00 – Initializes Print Register
- OP 01 – Enters 8 digits as 4 far left print character codes
- OP 02 – 04 enters the 8 digits in the next 3 print areas.
- OP 05 – Prints those 4 areas.
- OP 06 – Prints the 4 characts in OP 04 area formatted in current display mode.
- OP 07 – Plots a * in column 0-15 as specified in display.
- OP 08 – Lists labels
- OP 09 – Does nothing. Generates an error.

HHC 2025 – The TI-66

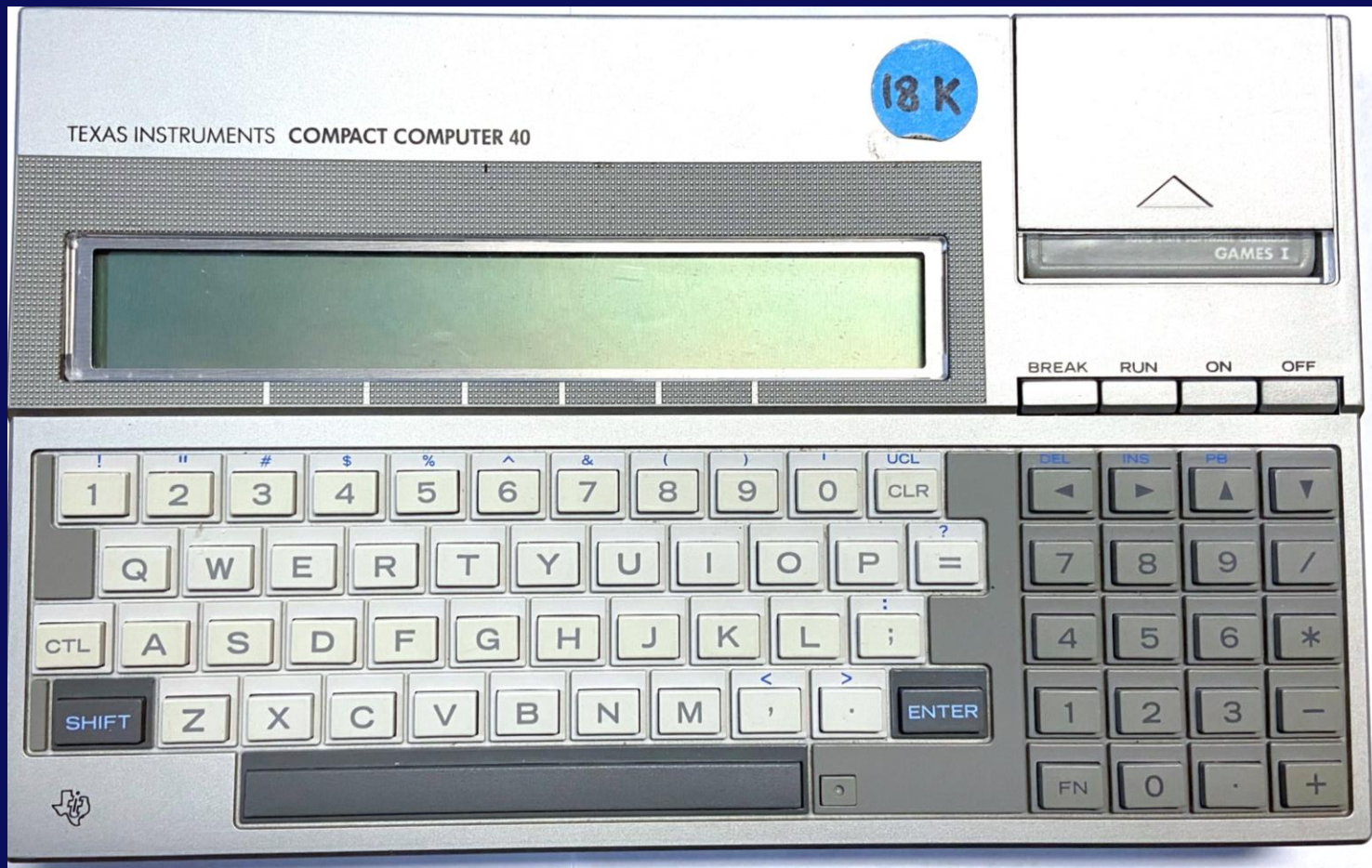
- OP 10 – Signum function.
- OP 11 – Population Variance. Press SQRT for std deviation.
- OP 12 – Y-intercept calculation. Press $x \leftrightarrow t$ for slope.
- OP 13 – Correlation.
- OP 14 and 15 – Predicts Y from X or X from Y.
- OP 16 – Displays current partition.
- OP 17 – Repartitions storage exactly how Part on KB does.
- OP 18 and 19 – Sets or clears flag on error state.
 - Funny that manual says they both set the flag on error.
- OP 20-29 – Increment register 0-9 by 1.
- OP 30-39 – Decrement register 0-9 by 1.

HHC 2025 – The RM-2000 and RM-3000

- Strangely, of the two, the RM-3000 was introduced first.
- Essentially, this was to be a portable BASIC computer.



HHC 2025 – and it became the CC-40



HHC 2025 – The CC-40

- Introduced in March 1983 for \$250, the CC-40 (Compact Computer) was a battery powered computer that ran for ~200 hours on 4 AA batteries. Discontinued in March 1984.
- Came with 6K of RAM. Could be upgraded to 18K of ram by desoldering the 6K from the motherboard and replacing. Hard to do, but people did it. Had 34K ROM. BASIC built-in.
- Lost RAM when batteries changed unless AC connected.
- One module port. ROMS were Memo processor, Math, Stats, Advanced EE, Finance, Editor/Assembler.
- Issues? Single program space. Type NEW and cry later.
- No mass storage ! No clock. Displays 31 of 80-character line.

HHC 2025 – The CC-40

Now a \$33 RAM/ROM multicart from:

<https://www.soigeneris.com/ti-cc-40-ramrom-card> (Jeff Birt)

Provides 16 pages of 16K RAM or 32K ROM, selected via a rotary switch.

Assembler can transfer data to/from the RAM pages. Includes all ROMs.

Has a 512K ram chip.

2032 battery backup.

Great addition.



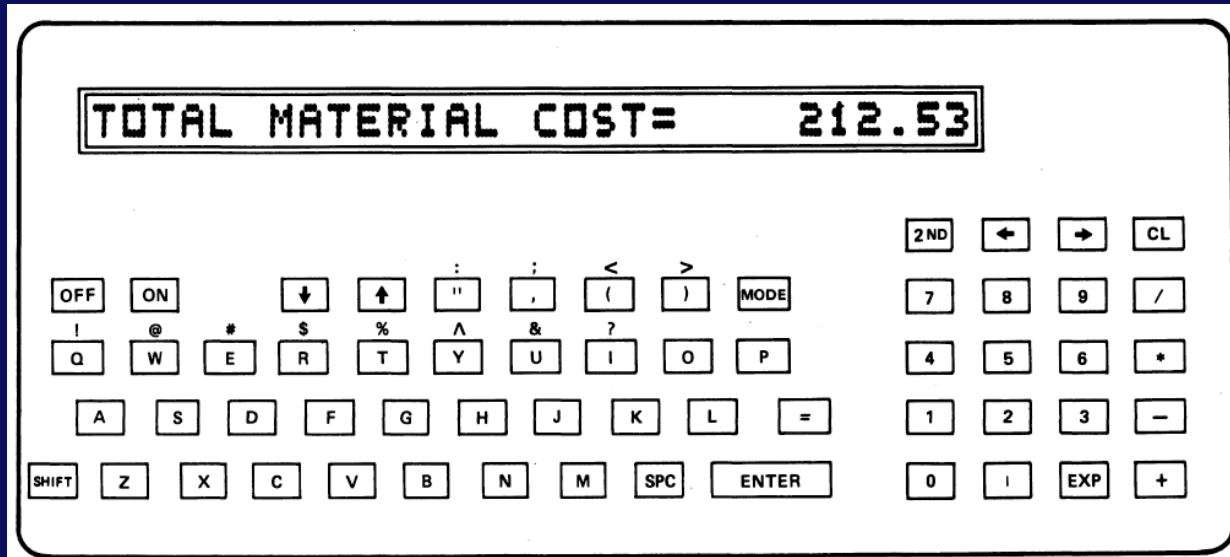
HHC 2025 – The CC-40

Resources:

- 1) The 1983 year of the TI PPC Notes (on the HHC drive) contains a lot of information on the CC-40, including programs submitted by members, such as Jive Turkey and a Speedy factor finder? 9999999967 prime in 1 hour 55 min using the TI Math Cartridge. That's slow!
- 2) Datamath.org
- 3) oldcomputers.net/cc-40.html
- 4) www.soigeneris.com
- 5) And David Ramsey's CC-40 review in BYTE.
 - <https://archive.org/details/byte-magazine-1983-09/page/n201/mode/2up>

HHC 2025 – The RM-2000

- The RM-2000 was to be the ALC (Advanced Language Computer).
- Originally, talk was of a FORTRAN cartridge.
- Model eventually ran BASIC with a Pascal module.
- Eventually it
- evolved into the



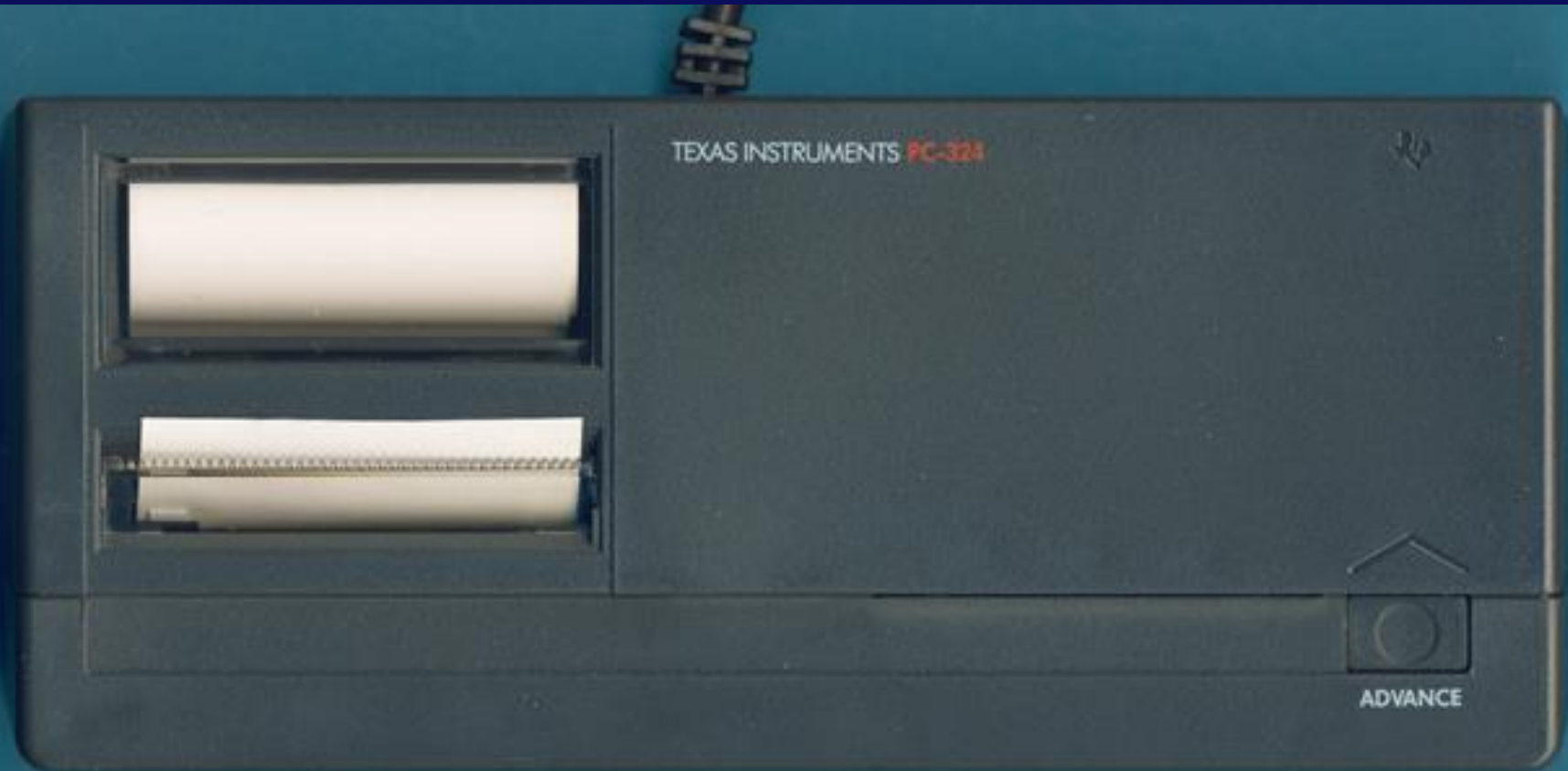
HHC 2025 – and became the TI-74



HHC 2025 – The TI-74

- The TI-74 (and TI-95) were introduced in 1986.
- The TI-74 (\$135) had a 31-character window into an 80 character one-line display.
- 8K RAM. One module port. Add 8K RAM or ROMs.
- Five ROMs: Math, Stats, Finance, Chemical Eng, Pascal.
- Note: Help find the Finance manual !
- Had 70 “calculator” functions / 113 BASIC commands.
- Optional 24-character printer and cassette interface. Printer had 4K rom and 128 bytes. 😊
- Introduced the TI-74 S aimed at vertical markets.

HHC 2025 – PC-324



HHC 2025 – The TI-95

- The TI-95 (\$200) had a 16-digit display with menu labels.



HHC 2025 – The TI-95

- The TI-95 (\$200) had a 16-digit display.
- 8K RAM. One module port. Add 8K RAM or ROMs.
- Three ROMs: Math, Stats, Chemical Eng.
- Optional 24-character printer and cassette interface.
- Intended to be a follow-up to the TI-59 – TI-95.
- TI PPC user group enjoyed this machine, but it came very late in the game.

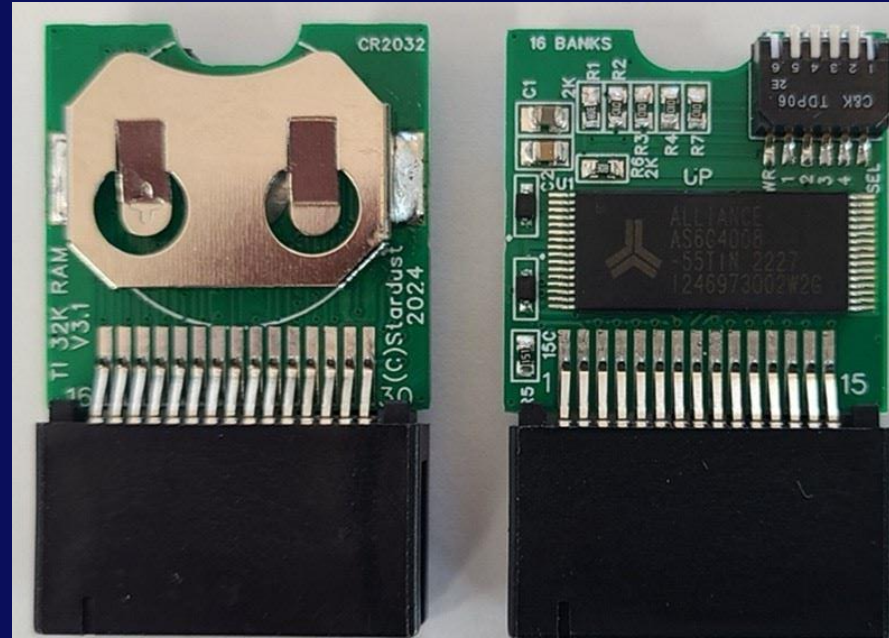
HHC 2025 – The TI-74 and TI-95

If you own either of these... This is a great addition.

TI-74/95 Flash Cart \$28 www.soigeneris.com - Jeff Birt

Contains all roms for each machine.

Including a user-created rom
an assembly for the TI-95
developed by Robert AH. Prins.
Formatted owner's manual is
on the conference drive!



HHC 2025 – The TI-95 Utilities Cartridge

OFF - saves the entire machine state	LRN - but with a twist
CP> - CP from the current step	DFA - create DFA without ASM
BKU - a complete backup system for use with the PC Interface	
CRC - the ultimate checksum	IAS - INV ASM, but without bugs
GTL - LL like lister for GTL/GTO	SBL - LL like lister for SBL/SBR
DFN - LL like lister for DFN/DFA	CMS - a nnn.sss register clearer
LR - but with many new features	SHL - a very fast Shell sort
MRF - merge files to end of PGM	REN - rename files in MEM
CJ - date to number (ML-20)	JC - number to date
NOR - normal distribution	INO - inverse normal distribution
SFF - a really fast PF replacement	UCD - to UnCD MEM
ENT - mathematical integer	MOD - calculates X mod T
POL - polynomial evaluator (ML-08)	SGN - a true -1/ 0 /+1 sign function
CHR - redefine CHR 000..004	MRX - a combined MRG FIX
SQR - square roots up to 2500 digits	X! - factorials up to 1000!
DOW - SBA 600 creator (????)	EXE - execute MEM based SBA 600s
REX - access the keystroke coded ROM functions	
ROM - transfer any memory to PGM	POP - change SBR into GTO
R-B - RTN or BRK (TI-59's RTN)	RPO - restore pending operations
SBR - print SBR stack	SPO - save pending operations
STU - system alpha to user alpha	

HHC 2025 – The TI-95 Utilities ROM

- **The Utilities Cartridge SFF Prime factoring program...**
- **Returns 9999999967 as prime in 7 min 41 seconds compared to just under 2 hours for the Texas Instruments manufactured CC-40 cartridge.**
- **The extended precision square root and factorial programs are also very impressive.**
- **Other features add all sorts of OS extensions that should have been present in the original machine.**

HHC 2025 – After the TI-88

- So, which of these should be on your “collector” list?
- None are nearly as cool as previous year’s models I have suggested – be sure to get your SR-51A and SR-56 and TI-58C first.
- But the TI-66 is cheap on eBay but slow, slow, slow.
- The TI-95 or TI-74 are interesting, but more expensive. However, the Multicart ROM/RAM makes these interesting.
- The CC-40 is harder to find these days. The Multicart makes this interesting too, but I find myself running the blackjack program most of the time.
- Questions?

AND NOW BACK TO
OUR REGULARLY
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PROGRAMMING