

HP Forum Archive 13

[[Return to Index](#) | [Top of Index](#)]

My good luck: a 10C

Message #1 Posted by [John](#) on 2 Sept 2003, 9:47 a.m.

Today, an old civil engineer friend of mine called me in for a consultation on a project. He was very satisfied with my advice and when I was about to leave, he said "now be sure to send me a bill for your services." It was then that I noticed two 10C's on his desk. Oh, I said, you have two of those? -Yes, you like them? Here, have one! I thanked him and told him there wouldn't be any bill coming. (I'm comfortably retired anyway, and usually I don't charge my friends for 'over the board' advice, especially when I even get a good lunch...) This 10C (1982) is very well kept, with only minor signs of use.

Congrats (n/T)

Message #2 Posted by [Raymond Del Tondo](#) on 2 Sept 2003, 10:37 a.m.,
in response to message #1 by John

Re: My good luck: a 10C

Message #3 Posted by [Patrick](#) on 2 Sept 2003, 4:20 p.m.,
in response to message #1 by John

So, he still has one left, eh? What was your friend's phone number again?

;-)

Congrats, John!

Re: My good luck: a 10C

Message #4 Posted by [jimc](#) on 2 Sept 2003, 7:18 p.m.,
in response to message #1 by John

John, you are a fortunate fellow indeed! I have only recently managed to get a hold of one of these little fellas and I think its a lot of fun! I also got a copy of the manual with it, and so if I can offer up any help in any way, please let me know!

Take good care of it, and use the little guy often!

Congrats.

Re: My good luck: a 10C

*Message #5 Posted by [Iqbal](#) on 2 Sept 2003, 8:00 p.m.,
in response to message #4 by jimc*

Hey John, Does he need any surveying advice? :)

Re: My good luck: a 10C

*Message #6 Posted by [christof \(NoVA US\)](#) on 3 Sept 2003, 12:40 p.m.,
in response to message #1 by John*

I just got my first voyager (scientific, that is), too and I'm beginning to see what people mean about them. For true pocket programmables, they are really nice units!

Good luck with yours, and use it often :)

Re: My good luck: a 10C

*Message #7 Posted by [bill platt](#) on 3 Sept 2003, 1:13 p.m.,
in response to message #6 by christof (NoVA US)*

Hi christof,

what kinds did you have before? I think I remember you having a 48, and a 41 also?

Re: My good luck: a 10C

*Message #8 Posted by [christof \(NoVA US\)](#) on 3 Sept 2003, 4:22 p.m.,
in response to message #7 by bill platt*

I've got a bit of a collection now-

For pretty much daily use, I tend to use the 48, 42, and 41 most. (though the 41 is more often used to explore the 41 than for calculating maximum rack densities and network aggregation) The 28 is nice, but it's losing ground. I like the keyboard better than the 48, but the display and memory of my black LCD gx is winning out.

I also use a 17Bii and 19Bii (I keep them both updated, not sure yet which one will get the final nod) for some home business data and calculations. (If the 17Bii had 32K, I think it would hold all the data I need for a year.)

The Voyager is new, but I'm working on some programs already :)

I do have a few others- I'm a nut for handheld computing devices, but they have to be onboard programmable to be 'real' :)

Re: I'm a nut for handheld computing devices

Message #9 Posted by [Valentin Albillo](#) on 4 Sept 2003, 4:52 a.m.,
in response to message #8 by [christof](#) (NoVA US)

Christof wrote:

" I'm a nut for handheld computing devices, but they have to be onboard programmable to be 'real' :) "

Then do yourself a favour and get some Sharp vintage handheld programmable pocket computers. There are plenty of them in eBay, at quite low prices, and I'm sure you'll agree they're incredibly enjoyable machines, with physical quality and features second to none.

Some suggestions: if you like financial models, try and get a [Sharp EL-5510](#) and enjoy comparing its features and capabilities to the HP-12C/12CP. You'll be amazed ! As for scientific models, try the [Sharp PC-1475](#) with its matrix capabilities and 20-decimal precision versus the HP-15C, or if you happen to like graphics, try the [Sharp PC-1360](#) with its 4x24 characters, 150x32 pixels. And for maximum pocketability, get a [Sharp PC-1260](#), [1261](#), or [1262](#), which are even smaller than an HP-15C, fully metallic, boast up to 10 Kb of RAM, and feature a full alphanumeric keyboard and 2-line display, running programs 10+ times faster than an HP-15C, by the way !

All four models are programmable both in [extended BASIC](#) and in [machine language](#) right from the keyboard, as per your request, and have [full I/O capabilities](#) to a number of peripherals, including printer, mass storage, serial devices, even to a PC.

If you happen to like them, you can build quite a sizable collection now that their prices are still low (that's gonna change fast). Not only will you enjoy and use them, but it will also broaden your perspective re handheld computing devices. Most HP calc fans and collectors tend to think there has never existed anything approaching the quality and capabilities of their beloved calcs, which blinds them to the possibility of appreciating some other equally good or even better machines. Owning and getting to know well said Sharp machines will open many an eye and mind.

Best regards from V.

I sell or trade a vintage SHARP

Message #10 Posted by [R Lion](#) on 4 Sept 2003, 7:16 a.m.,
in response to message #9 by Valentin Albillo

PC 1350 + RAM card of 16kb. In PERFECT cosmetic and working condition.

Raul L

Edited: 4 Sept 2003, 7:40 a.m.

A fine machine, indeed [LONG]

Message #11 Posted by [Valentin Albillo](#) on 4 Sept 2003, 9:26 a.m.,
in response to message #10 by R Lion

The [Sharp PC-1350](#) is extremely similar to the 1360 model, and even somewhat faster, actually. It does have a very comfortable, fully alphanumeric QWERTY keyboard and a wonderful 4x24 character alphanumeric and graphic (150x32) display (including lowercase characters).

This is the machine I use the most, together with an HP-15C. Its large display makes it a pleasure to enter and edit program lines and expressions to be evaluated. You can recover any line/expression once entered/computed, edit it via cursor keys, and reevaluate it again with utmost ease. In case there's some error, a message appears and the cursor will be positioned at the exact place where the error was detected, which is extremely fast and convenient.

I took this machine with me during 2002's summer holidays and wrote a fully graphic version of my HP-41C Othello for it, showing the full 8x8 board on the display and allowing the user to enter moves by navigating said board with the cursor keys. This machine is so comfortable to use that I did write the whole program directly on it, from scratch, without ever needing pencil or paper, the 4-line display was more than enough to avoid losing sight of the whole 'picture'.

In short, I would heartily recommend this machine to anyone and everyone. If you've got one, you can find a lot of information and some software for this machine [here](#), including some graphic games written in machine language.

In case you're wondering how programming looks like in this machine, here's an excerpt from my Othello program, namely parts of the subroutine that sets up the graphic board and the one that checks if it's legal for you to pass. You can see in the listing instances of nested FOR..NEXT loops, subroutine calling, multiple statements per line, logical decisions, printing user-defined graphics in binary form at a given position, string arrays, string handling, etc.:

```
240 GOSUB 140: PRINT "Setting up board...";
245 FOR X=3 TO 31 STEP 4: FOR Y=2 TO 30 STEP 4: PSET (X,Y)
246 NEXT Y: NEXT X
250 M=45, N=55, B(44)=-1, B(54)=1, A=-1, H=44
252 GOSUB 435: IF U LET M=55, N=45
255 B(M)=-1, B(N)=1, H=M: GOSUB 435
257 A=1, H=54: GOSUB 435: H=N: GOSUB 435
260 GCURSOR (36,15)
262 GPRINT "1C701C00705070007040700028282800787878780028"
265 GCURSOR (38,22)
268 GPRINT "7C1830187C007C545C0028282800784848780028"
269 RETURN

270 L=LEN C$(0)-K, C$(1)=LEFT$(C$(0),K-1)
275 C$(0)=RIGHT$(C$(0),L), C$(0)=C$(1)+C$(0): RETURN
280 GOSUB 140: PRINT "Checking your pass": K=1
285 S=ASC MID$(C$(0),K,1): IF ABS B(S) GOSUB 270: GOTO 300
290 A=1, R=1: GOSUB 95: IF N RETURN
```

BTW, in case any of you are interested, I'll make this program freely available online in the very near future, as soon as I get some free time to set up a web page for it. My original Othello program for the HP-41C was featured in PPC Technical Notes, circa 1981, and a 'version 2' appears in the PPC Journal as well, though you can find it online at [Gene's excellent site](#).

Best regards from V.

Re: A fine machine, indeed [LONG]

*Message #12 Posted by [Veli-Pekka Nousiainen](#) on 4 Sept 2003, 9:45 a.m.,
in response to message #11 by Valentin Albillo*

I think I got the Sharp PC-1261 on my hand, works ok, but I take the batteries out now, just to make sure they will not leak.
http://pocket.free.fr/html/sharp/pc-1261_e.html

Re: I'm a nut for handheld computing devices

*Message #13 Posted by [christof \(NoVA US\)](#) on 4 Sept 2003, 10:31 a.m.,
in response to message #9 by Valentin Albillo*

I've got a few- a PC-1500, two 'reabdged' radio shack models (pc-1 and pc-2), In the 'not really programmable" department, I've also got a memosriter el-7001.

I have to say that Sharp has done some wonderful things- first in offering a continuous array of onboard BASIC programmables from the late 70s on right through the latest of the BASIC programmable wizards. Sadly, I haven't seen any of those on store shelves lately. (though the keyboard version of the linux-based zaurus is really impressive)

I do only have a few of the sharps- and several of the ones I really want I haven't found yet.

Sharp made a few decisions, also, that I think HP messed up. Onboard rs-232 serial, and mass storage in 'standard' tape formats, for example.

love em!

HP's allegedly wrong decisions [LONG]

*Message #14 Posted by [Valentin Albillo](#) on 4 Sept 2003, 11:40 a.m.,
in response to message #13 by [christof \(NoVA US\)](#)*

christof (NoVA US) posted:

"Sharp made a few decisions, also, that I think HP messed up. Onboard rs-232 serial, and mass storage in 'standard' tape formats, for example."

Here's a short list of the 'few' decisions Sharp got right and HP got wrong [of course, IMHO]:

- All Sharp handheld BASIC programmables, be they big (PC-1500A) or very small (PC-1262) did include onboard RS-232 serial I/O, plus interfaces to printer and/or 4-color plotter and mass storage (cassette or floppy drive).

In contrast, a handful of HP machines did include serious I/O (and then, proprietary (read expensive) like HP-IL), mass storage or printing. Such powerful models as the HP42S (which really is begging for some I/O) have none. The tiniest, smallest SHARP can be connected to a much larger printer/cassette 'dockstation' right from the box. You can have hundreds of programs stored in inexpensive audio cassettes or micro-tapes, under remote control.

- All Sharp BASIC programmables feature a BASIC dialect 99.9% upward-compatible among them, such that your programs written for a model can be loaded (from tape !) and run on others. Automatic conversion of line numbers and incompatible statements is done, and the tape recorded by an earlier model can be read in the newer.

On the other hand, just try to load (by hand) an HP-25C program in an HP-15C, say (with GTO label but no GTO 'line number' unless you do some fancy tricks with the I register), or an HP-15C program in a HP-41C, or an HP-41C program in an HP-28S or ... you get the point.

- Most Sharp BASIC handhelds are metallic (not metallic-painted plastic), very sturdy, quality built, consistently from the older models (PC-1211) to much newer ones (PC-1475). They will stand use and abuse, they have the same good keyboards and great displays, large or small as the machine may be. The theme here is consistent-quality throughout all of them.

HP has such different builds and qualities as Classic models like the HP-67, Woodstock's like the HP-25, then the Voyagers, then the Spice series (where construction quality took a deep dive), then the completely different HP-41C, then the HP-28C/S and its abysmal battery door and compartment, then the HP49 and its rubber keys, etc, etc.

- Sharp BASIC handhelds tend to have large amounts of RAM (for their time), with 4 Kb being a minimum, 16 Kb being typical, and 64 Kb/128 Kb being possible. Apart from the very earliest models, all the rest are quite fast [FOR I=1 TO 100: NEXT I taking between 0.8 sec and less than 0.05 sec], and most are expandable, accepting non-volatile extra RAM cards and even ROM application modules.

On the contrary, most HP handhelds have always been extremely lacking in RAM: 70 bytes for programs/data in the HP-10C, 203 bytes in the HP-16C, 448 bytes in the HP-15C, and about 2.3 Kb in the HP-41CX, even the commercially available HP42S had only 7 Kb at a time where any Sharp machine would come with at least 16 Kb built-in. Only a few HP's have accepted ROM modules or cards, and even HP-41C/71B RAM modules were completely volatile if removed from the machine.

- All Sharp BASIC handhelds but the very earliest have featured an extended version of 'standard' BASIC, including such niceties as two-dimensional arrays, string or numerical, string functions, long variable names, multiple statements per line, powerful I/O functions, and even comprehensive graphics functions in some models. All models featured the same BASIC plus their particular extensions, be they financial functions, statistic functions, computer science functions, all perfectly integrated: you can compute a sine on a financial model or a logarithm on a computer science model. All of them could be programmed in machine code right from the keyboard, via PEEK, POKE, CALL.

In contrast, HP models featured RPN, which is obviously less high-level than BASIC, in various flavors. Many specialized models lacked general functions (like trigonometrics in financial models or transcendental functions in computer science models), all had their particular version of RPN, with GTO-number versus GTO-label, GSB existing or not, indirect operations being allowed or not, whatever. None of them were programmable in machine code except by using some ridiculously expensive and/or mostly inconvenient external hardware, if at all.

- And last but not least, Sharp handhelds were always much more affordable than HP's, with a much greater quality/price ratio. For instance, the Sharp PC-1211, an HP-41C's contemporary, offered equivalent power, a full QWERTY keyboard, a 24-character dot-matrix display, metallic body, I/O, BASIC, and superior built-quality at 1/3 of the price. Same for the rest.

This list could go on and on, but I think anyone can get the point. This is not meant to be HP-bashing, I love my HPs as much as you do yours, thank you very much, it's only that the next time you boast that HP handhelds are the best in the world, lightyears ahead of the rest, you'd do

well to think twice. At least it would save some heavy embarrassment if you happen to find a knowledgeable Sharp user.

Best regards from V.

Edited: 4 Sept 2003, 11:48 a.m.

Re: HP's allegedly wrong decisions [LONG]

*Message #15 Posted by [Veli-Pekka Nousiainen](#) on 4 Sept 2003, 12:34 p.m.,
in response to message #14 by Valentin Albillo*

After Saturn CPU was launched, the things changed quickly. Yoday you can write (using the latest Debug4x) software for both the 48 and 48 series. There is enough RAM and a standard serial/USB connection to a PC. You described HP machines from the past. How is Sharp today?

VPN

Re: HP's allegedly wrong decisions [LONG]

*Message #16 Posted by [christof \(NoVA US\)](#) on 4 Sept 2003, 2:21 p.m.,
in response to message #15 by Veli-Pekka Nousiainen*

How is Sharp today?

I'm writing this on my Zaurus 750. It's a different world now- this is more powerful a handheld than most of my old laptops. Really- I watch streaming video on this for demo purposes at work.

BASIC and machine code onboard? sure! And C, lisp, perl, shell programming- all installed right now.

Wireless networking, 64meg RAM onboard, 64meg flash onboard, 512Meg sd card installed (the CF slot is being used for wireless)

My first handheld

*Message #17 Posted by [Tizedes Csaba](#) on 4 Sept 2003, 1:33 p.m.,
in response to message #14 by Valentin Albillo*

Hello!

My first handheld was a CASIO FX-850P with plus 8K RAM-PACK. Everything was right on this pocket computer too, as Valentin write about SHARP's.

When I began the university, I used a HP32SII. And not my CASIO... I don't know why I forgot my favourite PC. It's got wery powerful BASIC, 116 built in application program, 10 progs in the memory parrallel, PEEKs and POKEs (yeahhh! I liked it!!!), and 13264 bytes of RAM.

But, when I want to solve or integrate an equation, calculate in polar coords or with complex numbers, the CASIO is not was really flexible.

Today, if I want to solve a problem, the order is the next:

1. thinking about it
2. paper and pencil
3. HP32SII (just tapping->equations->programming)
4. HP48SX (equations->graphs->progs, and the result's graphs)
5. table-PC with Maple (to give simbolic/general result, if it is possible)
6. table-PC with programming language (numerical method)

But I think, I will take back my old CASIO again...

Csaba

Sharp pockets

*Message #18 Posted by **Pierre Brial** on 8 Sept 2003, 5:39 a.m.,
in response to message #9 by Valentin Albillo*

Hello Valentin

I would like to discuss with you about Sharp Pocket computers, but as this is off topic here, could you send me your email address ?

Here is mine : pbrial@guetali.fr

All the best

Pierre

Re: Sharp pockets

*Message #19 Posted by [Valentin Albillo](#) on 8 Sept 2003, 6:29 a.m.,
in response to message #18 by Pierre Brial*

Done. You can (and should) remove your message, I'll do the same with this one.

Best regards from V.

[[Return to Index](#) | [Top of Index](#)]



[Go back to the main exhibit hall](#)