TI PPC NOTES, special edition on the TI-88, June 1, 1982.

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Today I learned that TI has presented the new TI-88 to the technical press, here in
the US and simultaneously to representatives in Europe, in Nice, France.

As promised in the accompanying issue, v7n6, I am enclosing this special issue with
all of the technical details I learned so far. TI was very helpful in sending me all of
the requested information, including (unasked for, but much appreciated) glossy pictures
of the TI-88, the new PC-800 printer and the new CA-800 cassette interface.

The calculator itself is about the size of the TI-59, much lighter though, because
of the absence of a card reader. The display is a 16-character liquid crystal one (LCD)
tilted about 30 degrees up, for better visibility. The keyboard has 9 rows of 5 keys.
All of the keys can be converted to alpha (direct alpha entry!) by means of one toggle
key marked ALPH.

On the back of the calculator there are 3 output ports, two for modules (CR0MS or
PRAMS) and one I/O port for peripheral devices such as the printer, the cassette inter-
face, and so on. Each CROM contains 15,000 steps, prompting in English, French and Ger-
man. There are already ML, EE, STAT, FINANCE, SURVEYING, MATH, CHEMICAL ENGINEERING and
a special PROGRAM DEVELOPMENT MODULE to convert TI-59 to readily runnable TI-88 pro-
grams.

Each of the characters in the 16-character alphanumeric liquid crystal display is
formed by means of a 5 by 7 dot-matrix, rather than with the usual segments. It looks
very attractive seeing a prompt display that says CAN I HELP YOU?

The TI-88 contains 960 program steps, just as the TI-59 did. But there are also two
permanent memory modules of each 1184 steps, which might be plugged into the CROM ports,
making the total number of steps available a phenomenal 3328 or if you prefer 416 data
registers. By the way, you may repartition now by one single register, instead of the
usual (TI-59) block of ten. Thus, the output ports may contain either modules of 15,000
steps or your permanent memories. The latter contain batteries good to last five years.
Finally we will have full compatibility from one calculator to another.

Besides loading your programs into these PRAMS you can also load them into an ordi-
nary audio cassette by means of the CA-800 cassette interface. I can see that members
would be loath to send me PRAMS with programs, but I can forsee a lively cassette inter-
change.

In the field of programming goodies: my guess is that about 75% of the programming
is compatible with the TI-59. But the 25% remaining new additions are fantastic. There
are now 89 OP codes. To this end TI included 63 HIR registers, of which you may (legally
this time) recall every digit or bit and set, reset, flip or test it at will. Boy, are we going to do some synthetic programming!

The first 26 registers can be addressed numerically or by an A to Z address. Thus
you may recall variables by simply mentioning their name. You may further also branch to
any of the 26 alpha labels and to 100 numeric labels.(LBL A or LBL 67, for example.)

Another feature is IMPLIED MULTIPLICATION added to the AOS system. Thus, the square
root, the logarithmic and the trigonometric functions can be FOLLOWED by their argument.
As if this wasn't enough, TI has added a EQUATION EVALUATION feature, very much like the one
I recently saw in a Sharp hand-held calculator: Enter up to 88 instructions of an
equation in a special dedicated memory and you will be able to evaluate it at any time,
each time with different variables. And to round everything out, there are 24 user-
declared flags and 4 system flags.

The printer is portable and can be powered either by the AC current or by batteries. It
has only 16 columns and is attached by an embelmental cord to the calculator. One full
charge of the rechargeable battery in the TI-88 is supposed to last 200 hours.

And the last goodie I heard about is the timekeeping circuitry: year, day, date,
hour, second are constantly kept, even with the calculator turned off. Time can be accessed
under program control, such that an alarm may be implemented, in conjunction with (you
guessed it and we finally have one) a BEEPER.

A key buffer allows to enter up to 15 key strokes while the calculator is busy exe-
cuting a program. (live keyboard)

Prices (suggested retail): calculator $ 350.00, printer $ 185.00, cassette interface
$ 60.00, CROM modules $ 40.00, PRAMS $ 50.00.

Maurice E.T. Swinnen.
The New TI-88 calculator. Note the five prompting response keys on the top row. Some of the keys look strange to us, TI-59 users. In spite of the fact that the LRN key has been relegated to a secondary function, our newsletter will retain its emblem LRN.

The TI-88 and its two new peripherals, the printer PC-800, the cassette interface CA-800 and a (non-TI) cassette recorder.

P.S. To avoid the traditional "36 angry letters" demanding what all those "antiques" are doing here, I offer the following explanation: One of the dicta of publication is that you never show the reader a blank page. You always fill it up with something worth looking at. So I did.

The back of the TI-88 contains two CROM ports. Shown are the 15,000 step Master Library module and an 1184 step Constant Memory module. Both have identical external shape.