PC-BOSS

BASIC-OPERATING-SYSTEM

For SHARP-PC 1260-XVI
Version 09/19/86
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Preface and Description

The Pocket Computer Basic Operating System, short "PC BOSS", has been created specifically for the Sharp pocket computers PC 1260-XVI, PC 1261-VI and PC-1262-VI (equipped with the 16KB memory expansion by ECPS.)

PC BOSS enables the use of the memory area from 6805_{hex} to $7FFF_{hex}$ with Basic (Normally, this area is only available to machine language code or data)‼

PC BOSS has a length of 224 bytes, is not relocatable and occupies the memory area from 6805_{hex} to $68E4_{hex}$. This leaves a good 5913 bytes of machine language memory for Basic – together with the existing 9342 bytes this results in a total memory capacity of 15255 bytes ‼

And now the best: All owners of one of the above mentioned pocket computers with 16KB can get PC BOSS for free, given that either the pocket computer or the memory expansion has been bought from ECPS.
Please send us a copy of your receipt together with a self addressed stamped envelope (stamped with 1.30 DM‡) under the keyword "PC BOSS" and you will receive the software at no charge ‼

Those who haven't bought their computer or the expansion from ECPS can buy the program PC BOSS for 39.00 DM‡.

Your ECPS team wishes you many creative ideas while programming your computer.

P.S.
Here we want to express our biggest thanks to the author G. Waldhelm for the creation of this simple but therefore almost ingenious program PC BOSS. May God provide him with many more such ideas in the interest of all pocket computer owners.

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† The ZIP code is no longer valid.
‡ The DM has been replaced by the Euro right now and postage fees have risen.

Installation of PC BOSS

Attention : Users who have access to a copy of PC BOSS as a machine language program on audio cassette can skip directly to chapter <u>Operation</u> below.

<u>Please follow these steps:</u>
a) If you have a program loaded in your computer, save it to a cassette.
b) Press ALL RESET on the back of your computer without touching any other key.
c) Switch the computer into PRO mode and enter the following Basic program:

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10:CLEAR:RESTORE
20:FOR I=&6805 TO &68E4
30:READ B:POKE I,B:S=S+B:NEXT I
40:IF S<>22049 PRINT "ERROR, CHECK LISTING":END
50:PRINT"READY TAPE RECORDER AND PRESS ENTER!"
60:"S" CSAVEM"PC BOSS";&6805,&68E4:END
100:DATA  36,103, 44, 40, 25, 36, 16,102, 53,132, 27,103, 49, 56
110:DATA  18,103, 50, 56, 64,103, 69, 56,112,103, 67, 56,155, 91
120:DATA  91,121, 15,197, 16,104,224,214,  8, 57, 11,212,247,213
130:DATA   4, 16,102,225,  2,128,  3, 64,130, 27,120,104,199,243
140:DATA 189,  3,  0, 36, 66, 56,  7,  4, 36,132, 20, 45,  9, 16
150:DATA 102,227,132, 27,232, 35, 16,102,217,212,223, 55, 16,104
160:DATA 224,214,  4, 57, 61,212,251,213,  8,214,  2, 40,  8,213
170:DATA   2, 16,104,230,213,255, 16,104,229,213,255, 16,102,225
180:DATA   2,229,  3,104,130, 27,120,104,199, 16,104,224,214, 32
190:DATA  40, 44, 16,102,217,213, 32, 55, 16,104,224,214, 16, 57
200:DATA 113,212,239,213, 32, 16,102,252,132, 26, 16,104,227,132
210:DATA  27, 16,102,252,132, 27, 16,104,224,214,  4, 41, 90,214
220:DATA  32, 57, 42, 16,102, 25,132, 26,120,104, 62, 45,104, 16
230:DATA 104,224,214, 32, 57,160,212,223,213, 16, 45, 48, 16,102
240:DATA  25,132, 26, 16,104,225,132, 27, 16,102, 25,132, 27, 16
250:DATA 102, 25,132, 26,132,251,112, 55,  0, 20,229,104,  0,128
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d) After having typed in the complete program, switch the computer into RUN mode and type RUN. Then hit the ENTER key and wait ! If you see an error message, check the program listing and rerun the program after any corrections are made. If everything is o.k., the program will ask for a tape recorder set ready for recording: connect your data recorder loaded with an empty cassette and press ENTER. Should the saving procedure fail or should you want a backup copy, you can repeat the save process with DEF S.
Please proceed with the instructions, now !

2. Instructions

Load PC BOSS from cassette with the command CLOADM.
Hint: In case you just have entered the Basic program above and the loading of the saved program was successful, you can remove the Basic program with NEW.

On the next page, the additional commands known to your computer thanks to PC BOSS will be presented:

a) CALL &6805,1   activates the primary Ram area **Ram1**
                       If Ram1 has already been active, ERROR 3 occurs

b) CALL &6805,2   activates the secondary Ram area **Ram2**
                       If Ram2 has already been active, ERROR 3 occurs
Following this call you cannot directly edit in Ram2 nor enter or load a
program (read only). If a program is already present in Rram2, this can be
started normally. Listing this program is only possible after execution of the
following command:

c) CALL &6805,E   (Edit) unlocks Ram2 for editing and listing
                       If Ram2 has already been unlocked, ERROR 3 occurs
If you now enter MEM end press ENTER, the amount of free memory in Ram2 is
returned. In addition to unlocking, this command switches to a secondary set of
variables (Vars2) located in Ram2. In this mode, the primary variable area
(Vars1) cannot be accessed. This special state is only temporary until you have
typed in or loaded your program into Ram2. (If you have entered any of the
commands RUN, CLEAR or NEW in this state, Ram2 must be reinitialized with the
command POKE &66FC,0,128!) When you are done, you can switch back to Vars1 with
the following command:

d) CALL &6805,C   (Common) locks Ram2 again.
                       If the command has already been active, ERROR 3 occurs
This command is the counterpart to the unlock command. It activates Vars1 (the
primary variable area) and disables listing or editing the program in Ram2.

e) POKE &6834, PEEK &66E1   adapt PC BOSS to a change in ESP memory and must
   POKE &6836, PEEK &66E2   be issued after updates to the ESP configuration

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Enough spoken – In order to relieve your brain cells, it's time for two simple
examples:

Example #1
Enter the lines 10 to 30 as usual. Next, switch to Ram2 with the command
CALL &6805,2. Now, use command CALL &6805,E to unlock Ram2 for editing. After
this you can type in the second part of the program. When you are finished with
the input of part two, lock Ram2 again with the command CALL &6805,C. Now you
can either directly start part two (by RUN or DEF B), or, after having switched
to Ram1 by CALL &6805,1, part one (by RUN or DEF A).

              10:"A"
   Ram1   20:PAUSE "RAM AREA #1"
              30:CALL &6805,2:GOTO "B"   (switches to Ram2 and jumps to "B")

              40:"B"
   Ram2   50:PAUSE "RAM AREA #2"
              60:CALL &6805,1:GOTO "A"   (switches to Ram1 and jumps to "A")

Exanmple #2
In the second example, the program is completely contained in Ram1 and the
nearly 4 Kbyte large DIM array is located in Ram2.

              10:"A"
              20:CALL &6805,E
              30:DIM A(20,20)

You can save the complete 16KB, including all variables and DIM arrays with the
command CSAVEM "Name";&4000,&7FFF. Beware, this takes 7.5 minutes !! You can, of
course, save Ram1 and Ram2 independently with CSAVE"Name". The respective area
must have been activated before.

Your ECPS team wishes you success with the application of PC BOSS.
Should you have questions or need tips we are pleased to help !