

TECHNICAL MANUAL GPC 11 Rel. 5.00

- Errata Corrige -

1) PAGE 35:

SOFTWARE

A wide selection of software development tools can be obtained, allowing use of the module as a system for its own development, both in assembler and in other high level languages; in this way the user can easily develop all the requested application programs in a very short time. Generally all software packages available for the mounted microprocessor, or for the '11 family, can be used.

KERNEL: complete development tools for real time, control and data acquisition system. The software tools is saved on EPROM, while the developed application program can be either in RAM (debug phase) or EPROM (final installation). It works with an external communication program, executed on standard personal computer, connected through RS 232 serial line. The software tools is provided of standard function library.

BUFFALO: monitor debugger program ables to work in all the 68HC11 opearting modes and it can load and debug each code written for this microprocessor microprocessor family. It is provided of the standard commands available on hardware in circuit emulator and requires only an external P.C. connected through a serial line. BUFFALO is supplied on EPROM and floppy disk. (**Memory map 3**)

ROM BUFFALO: it has the same features of BUFFALO but it is available only on 68HC11A1 microprocessor, in fact it is saved on its internal ROM. For further information please read "OPERATING MODE SELECTION" paragraph.

CONTROL PASCAL: it is a cross compiler that uses a subset of PASCAL instructions, capables to generate code for **GPC® 11**. It is a powerful software tool that includes editor, PASCAL compiler and assembler executed on standard personal computer. The obtained code can be executed directly on the card thanks to a proper interactive program, saved on EPROM, that includes a run time module too. (**Memory map 3**)

C I.A.S.: it is a C cross compiler, capables to generate code for **GPC® 11**. It is a powerful software tool that includes editor, translator, C compiler and assembler executed on standard personal computer. The obtained code can be executed directly on the card thanks to a proper interactive program, saved on EPROM, that includes a run time module too. Inside the software tools there are a complete list of library functions that manage the card resource.

BASIC 11: complete development tools for MCS BASIC (interpreted BASIC language for industrial application). It needs a personal computer for console and program saving operations, while the debug, test and program operations are performed on the card. Special instructions which manage the on board peripheral devices have been added. (**Memory map 2**)

ICC 11: cross compiler for C source program. It is a powerful software tool that includes editor, C compiler, assembler, linker, library, simulator and remote symbolic debugger (when coupled with NOICE11), included in an easy to use integrated development environment for Windows. Library source are included and floating point is supported. (**Memory map 3**)

NO ICE 11: It is a personal computer hosted debugger consists of a target specific DOS program, NOICExxx.EXE, and a target resident monitor program. The two programs communicate via RS 232. NOICE includes: source level debug; a disassembler; a file viewer; memory display and editing; a virtually unlimited number of breakpoints; hardware free single step; definition of symbols; the ability to record and play back files of commands; on line help. (**Memory map 3 or 2**)

HI TECH C 11: cross compiler for C source program. It is a powerful software tool that includes editor, C compiler, assembler, optimizer, linker, library, project manager, and remote symbolic debugger, in one easy to use integrated development environment for DOS. Library source are included and floating point is supported. (**Memory map 3 or 1,2**)

DDS MICRO C 11: low cost cross compiler for C source program. It is a powerful software tool that includes editor, C compiler, assembler, optimizer, linker, library, and remote debugger, in one easy to use integrated development environment. There are also included the library sources and many utilities programs; floating point is not supported. (**Memory map 3 or 2**)

GET 11: it is a complete program with editor, communication driver and mass memory management for all '11 family cards. This program developed by grifo® allows to operate in the best conditions when BASIC 11, BUFFALO, ROM BUFFALO software tools are used.

All the described software tools can be supplied either on EPROM that must be mounted on **GPC® 11**, or a list of programs directly executable on personal computer and the technical documentation. For further information on this software packages please refer to proper software manual or visit grifo® web site, where some demo version are available.

Any software tools requires a suited memory configuration as described in the "MEMORY MAPS" paragraph.

2) PAGE 38: MAP 1

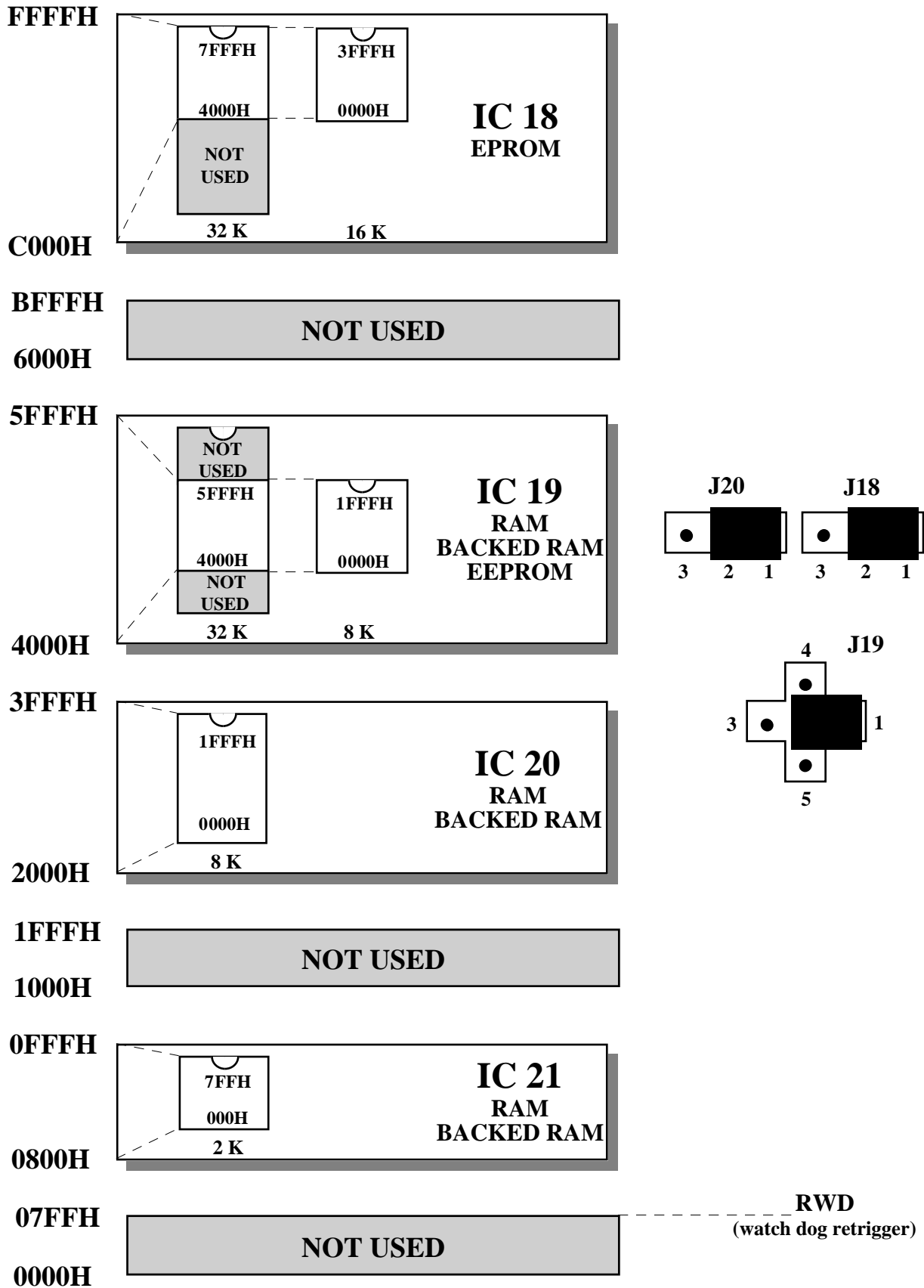


FIGURE 28: MEMORY MAP 1

Used by software tools as: HI TECH C11.

None of the internal microprocessor devices (registers, RAM, EEPROM) must be relocated.

3) PAGE 39: MAP 2

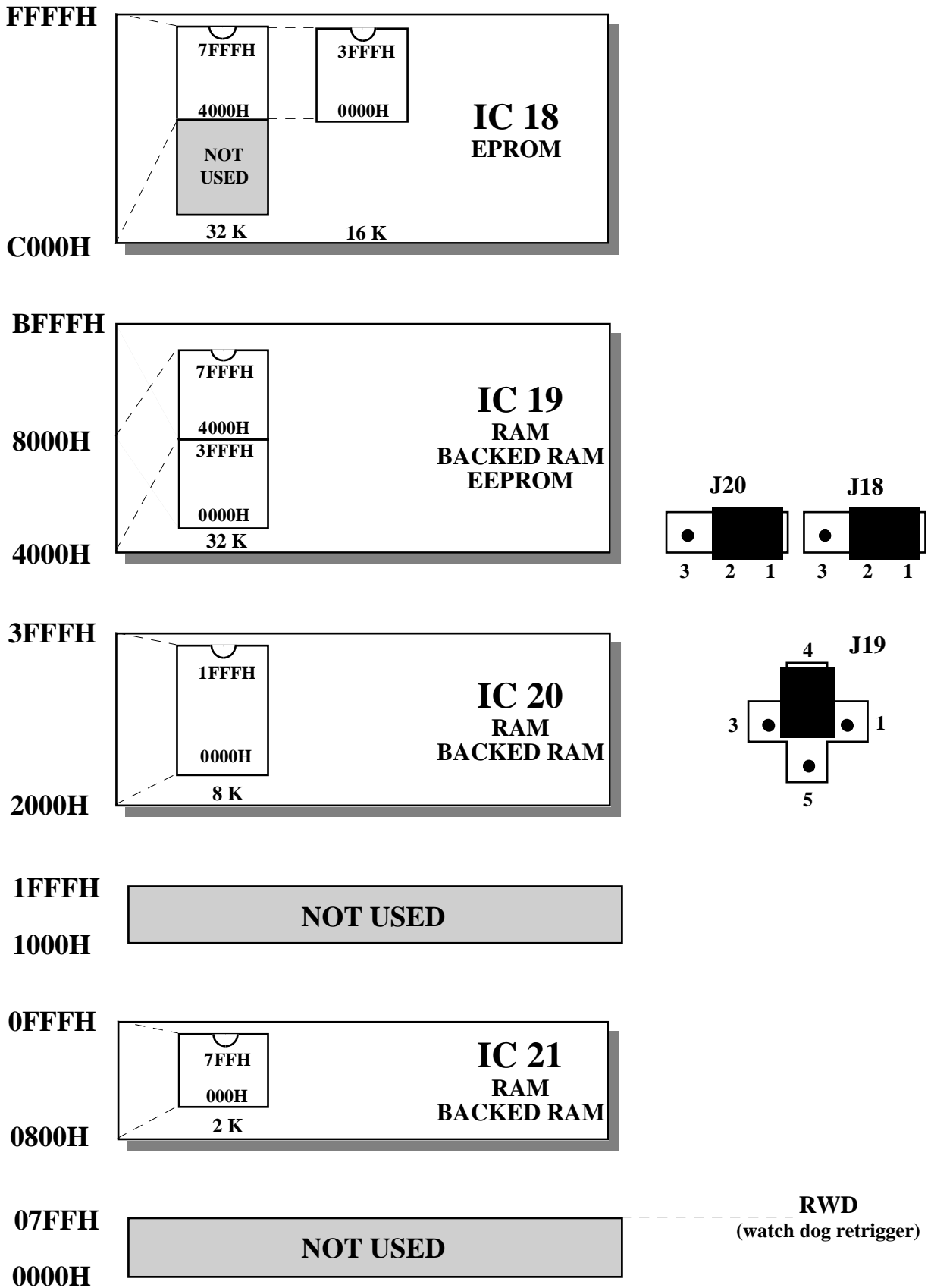


FIGURE 29: MEMORY MAP 2

Used by software tools as: NO ICE11, BASIC 11, HI TECH C 11, DDS MICRO C 11.
 The internal microprocessor EEPROM must be relocated on the free areas.



4) PAGE 40: MAP 3

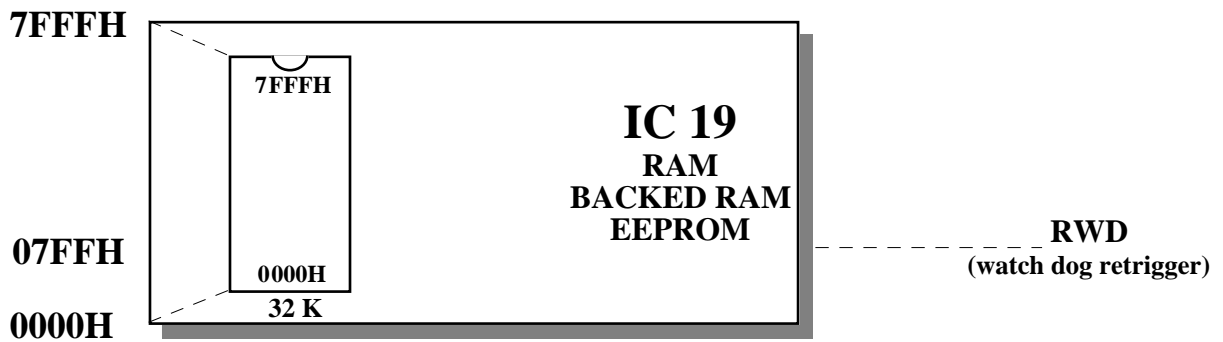
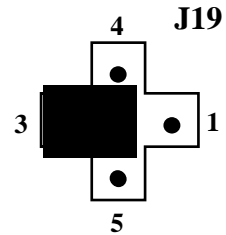
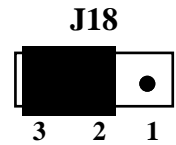
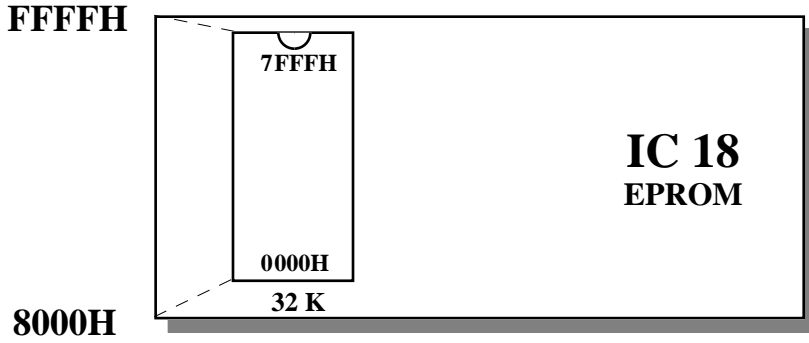


FIGURE 30: MEMORY MAP 3

Used by software tools as: HI TECH C 11, NO ICE 11, ICC 11, DDS MICRO C 11, BUFFALO. All the internal microprocessor devices (registers, RAM, EEPROM) are overlapped.