

TECHNICAL MANUAL GPC 114 Rel. 5.20

- Errata Corrige -

1) PAGE 5:

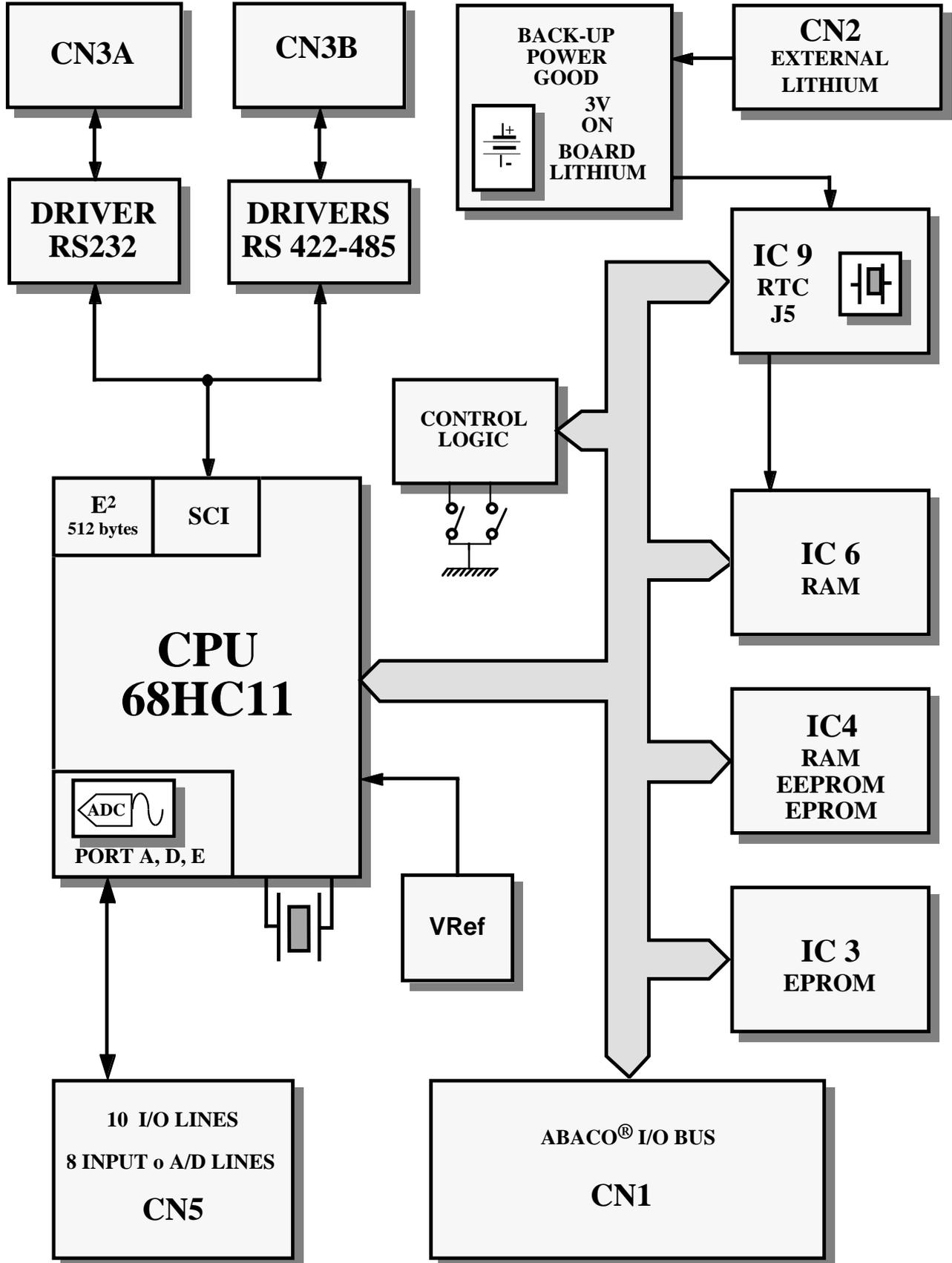


FIGURA 1: BLOCK DIAGRAM



2) PAGE 21:

| JUMPER | CONNECTION | FUNCTION | DEF. |
|----------|---------------|---|------|
| J1 | not connected | It does not connect STD signal (pin 1) of RTC IC9, to the CPU IC1 /IRQ signal. | * |
| | connected | It connects STD signal (pin 1) of RTC IC9, to the CPU IC1 /IRQ signal. | |
| J6 | not connected | It selects memory configuration in mode 2 or 4, according with J7. | * |
| | connected | It selects memory configuration in mode 1 or 3, according with J7. | |
| J7 | not connected | It selects memory configuration in mode 3 or 4, according with J6. | * |
| | connected | It selects memory configuration in mode 1 or 2, according with J6. | |
| JS1, JS2 | not connected | They do not connect termination and forcing circuits to the RS 422-485 serial communication line. | * |
| | connected | They connect termination and forcing circuits to the RS 422-485 serial communication line. | |
| JS5 | not connected | It selects the logic level "1" for CPU MODA signal (pin3). | * |
| | connected | It selects the logic level "0" for CPU MODA signal (pin3). | |
| JS9 | connected | Reserved. | * |
| JS14 | not connected | It does not connect the on-board battery BT1 to the back-up circuit. | * |
| | connected | It connects the on-board battery BT1 to the back-up circuit. | |
| JS20 | not connected | It selects the logic level "1" for CPU MODB signal (pin2). | * |
| | connected | It selects the logic level "0" for CPU MODB signal (pin2). | |

FIGURA 16: 2 PINS JUMPERS TABLE

3) PAGE 26 E 27:

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 68HC11 microprocessor 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 able to work in all the 68HC11 operating 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.
(**MODE 4** memory configuration)

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. It can be activated by acting on jumpers JS5 and JS20, please see figure 16 on page 21.

CONTROL PASCAL: it is a cross compiler that uses a subset of PASCAL instructions, capables to generate code for **GPC® 114**. 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. (**MODE 4** memory configuration)

C I.A.S.: it is a C cross compiler, capables to generate code for **GPC® 114**. 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. (**MODE 1** memory configuration)

HITECH C: 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. (**MODE 4 or 1,2,3** memory configuration)

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. (**MODE 4** memory configuration)

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. If matched with the ICC11 software packet, the single step interactive execution of "C" source is possible. (**MODE 4 or 1** memory configuration)

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. (**MODE 4 or 1** memory configuration)