

# BGC-8088 Microengineer Specification

**Part No:MP-Micro-8088-BGC-8088**

## Hardware:

- CPU: 8088 / 8088-2 runs at 4.77MHz.
- RAM: The system provides on board 32K SRAM, 4K of which is reserved for system, user can use the rest 28K SRAM for applications. 1MB RAM is optional.
- ROM: The system provides on board 32K program memory (EPROM), 16K of which has occupied by system. The another 16K is reserved for user's application programs.
- Keyboard: It has 56 keys which includes alphanumeric characters A~Z and 0~9, and special ASCII symbols.
- Display: The on board 40x2 LCD module or an 80x24 monochrome monitor can be used. The latter required a Hercules card.
- Printer interface (Built-in): Standard CENTRONICS interface, which is one of the most versatile general parallel printer interfaces available. The connection cable is the same as those used in IBM PCs.
- RS-232 interface (Built-in): The 8250 controls the RS-232 interface. The protocol can be programmed for different Baud rates, data bits and stop bits. Both download / upload are available.
- I/O expansion slot: The 62-pin expansion slot provides the signals which are compatible with the IBM PC expansion slot, but no DMA function is provided. Any IBM PC compatible interface card with no DMA function can be connected to the BGC-8088 through the expansion slot.
- Status port: The status port is used to display the keyboard status such as Caps lock, Ins, Ctrl + P. Each of these status are indicated by LEDs which turns on when the function is enabled. In addition, it provides the speaker interface to generating sound.



- Parallel Control Interface: Three ICs are used to provide the Parallel Control Interface. They are 8255, which contains three 8-bit I/O ports, the 8254, which contains three timers, the 8259, which contains five interrupt signals. User can use this interface more convenient instead of connecting through expansion slot.
- Power supply: The power supply provides DC +5V, +12V, -12V.

### Software:

- 8088 Assembler / Disassembler, assembly language coding.
- Memory commands: D-Display, M-Move, C-Compare, E-Edit, and F-Fill.
- Display and Rewrite the contents of Registers.
- Single step program execution and debugging..
- Breakpoint debug: for Setting up to 10 breakpoints for program debugging.
- Numerical systems conversions and calculations, such as conversion from binary to decimal or the addition of hexadecimal numbers.
- Communication routines for Downloading and Uploading between the BGC-8088 and external system.
- Driver routines for RS-232, Keyboard, Printer, Hercules card, LCD display. And BIOS Resume.
- Cross-Transfer BIOS for Disk system (option)
- EPROM driver routine (built-in BIOS V3.5 for EDS-8821 data storage)
- Demo programs for each experiment (option)

### Standard Parts:

System with 8K SRAM on board.	RS232C Cable (5' approx.)
Switching Power Supply.	50-Pin IDC Flatcable (2' approx.)
RS-232C System Diskette.	BGC-8088 User's Guide.



標高電子股份有限公司  
 Microport Computer Electronics Inc.  
 Tel/06-2753783 Fax/06-2375031  
<http://www.microporttaiwan.com>