GM886

INTEL 80286 MULTIBOARD CPU/RAM BOARD

* 8 MHz or 12 MHz Intel 80286 CPU.
* 1 MByte DRAM (Option 2 MByte) with no-wait state.
* 64 kB of EPROM
* Serial Port as IBM PC
* Parallel Port as IBM PC
* Full Memory and I/O inteface to 80-BUS. Dual processor mode.
* Option: 80287 Co-processor, 82586 Advance DMA processor.
* MS-DOS 3.2 Operating System.

The GM886 CPU card embodies many of the latest technological features applicable to a bus-orientated computer system. It is based on the INTEL 80286 CPU and is capable of operation at 12 MHz processor clock without any waitstate to the on-board memory. In line with many new computer board designs, the backplane bus is now no longer a method of providing a CPU with program and data memory, because of the high CPU speed, but may be viewed as an "I/O Highway", allowing a wide range of I/O devices and peripherals to be connected to the main CPU.

A very flexible 80-BUS interface has been designed, which will give the following accesses into the bus.

> Direct access to all 80-BUS I/O.
> Direct access to the full 80-BUS Memory Map using a 64k page window.
> Access to a 'semaphore' port which will allow full dual processor operation between
>   80-BUS processors and the GM886.
> Provision for I/O port translation to use Pluto Graphics software.

The board can be upgraded with another mega byte of memory and will when they become available also use 4Mx1 bit chips, giving a maximum total of 8 mega Byte memory on-board.

Other 'plug-in-and-go' facilities are a 80287 Math co-processor running at different speed from the main CPU, plus a 82586 advanced DMA controller for applications which require high speed transfer of data.

The operating system is standard MS-DOS 3.0 or later, which will give, by using the GM832 Video controller, access to a large range of language and application software. Utility for downloading custom software into the 64k EPROM are also provided. All software written for the Pluto range of IBM compatible boards will run without modification.

The board can be plugged into a Gemini system such as Galaxy or Odin and use their peripherals.