

# Enhancements to Global System Manager (BOS)

This bulletin is to announce a major repackaging of Global System Manager (BOS). The changes to the System Manager (BOS) nucleus are independent of the version of System Manager and apply to both System Manager V7.0 and System Manager V8.0. The variant number for the new nucleus software is V4.1.

The repackaging includes the following features:

- A new integral screen controller, +J5CB01, has been released. This version expects the keyboard translation tables to be held in a separate file, +J5NKEY. The keyboard translation tables have been relocated into high memory to take up less space in the nucleus segment.
- The V4.1 +J5NADA module works with the AHA-1540CF and AHA-1542CF cards (see bulletin GT650, 7 January 1994). The new hard-disk controller includes a disk-partitioning mechanism that is enabled using the =.NNNN customisation program. The new disk-partitioning scheme allows a System Manager SCSI disk to be split into a number of partitions. This scheme is private to System Manager and has been designed for use with SCSI disks of capacity 2 Gb or larger, although it may be used with any size of SCSI disk. If an attempt is made to configure a non-partitioned disk of 2 Gb or greater (volume format P259Z) or 1 Gb or greater (volume format P246Z), the Adaptec controller will return the size of the disk in 512 byte blocks rather than bytes. This reduced size will be indicated by the \$U report. This disk partitioning scheme does NOT allow a SCSI disk, accessed via the Adaptec controller, to be split between System Manager and MS-DOS (or System Manager and Unix). This new SCSI-disk partitioning scheme within the ADAPTEC hard disk controller is completely independent of the traditional System Manager (BOS) BIOS disk partitioning mechanism.

Use =.NNNN option 8 (Adaptec SCSI disk partitioning) to create the partition map. The actual partition used for each virtual hard disk on a partitioned physical disk is selected by the "partition number" prompt in Global Configurator. The volume format must be P259Z. A partition number of 0 (i.e. the default) indicates that the disk is not partitioned.

- It is now possible to select those interrupt vectors that are initialised by the System Manager Central Interrupt Handler (CIH), +J5NINT. This option is expected to be useful when non-System Manager, interrupt-driven, peripherals are attached to the computer. Use Global Configurator to modify the "Interrupt mask flag" in the nucleus section of the configuration file:

Set bit-0 (0#01) to prevent the use of IRQ-2  
Set bit-1 (0#02) to prevent the use of IRQ-3  
Set bit-2 (0#04) to prevent the use of IRQ-4  
Set bit-3 (0#08) to prevent the use of IRQ-7  
Set bit-4 (0#10) to prevent the use of IRQ-10  
Set bit-5 (0#20) to prevent the use of IRQ-11  
Set bit-6 (0#40) to prevent the use of IRQ-12  
Set bit-7 (0#80) to prevent the use of IRQ-15

For example, a flag value of 0#5A (i.e. 01011010 binary) will prevent the CIH from initialising the interrupt vectors for IRQ-3, IRQ-7, IRQ-10 and IRQ-12; a flag value of 0#FB will result in the CIH initialising only the interrupt vector for IRQ-4; a flag value of 0#FF will prevent the CIH from initialising any interrupt vectors.

- It is now possible to select the modem control line used for busy-line handling by the S.PRINT serial printer controller. The "extra attribute flag" in the S.PRINT section of Global Configurator specifies the busy-line:

Extra attribute flag      Busy-line

#00	DSR
#01	CTS
#02	DCD

- The TCL PCC/i and Superport cards are now supported by System Manager (BOS) using the V4.1 nucleus variant.

The following members of the "TCL Intelligent Serial I/O Family" are now supported:-

<u>TCL serial i/o subsystem</u>	<u>Console</u>	<u>Printer</u>
TIS Hyperport	HYPER	HYPER
Hyper/MX	HYPERMX or TCLSYNC	HYPERMX or HYPERMXP
PCC/i	PCC/I or TCLSYNC	PCC/I
Superport	PCC/I or TCLSYNC	PCC/I

The entries in the "Console" and "Printer" columns refer to options in Global Configurator.

The new TCLSYNC and TCLASYNC console controllers will result in faster throughput (over the HYPERMX and PCC/I controllers, respectively) by enabling a special "block-mode" display option.

- The System Manager "core dump" module, +J5NC0R, is now distributed on all System Manager (BOS) BACRES diskettes. DO NOT ATTEMPT TO ENABLE THIS OPTION UNLESS EXPLICITLY ADVISED TO BY THE TIS SOFTWARE SUPPORT DEPARTMENT.
- The latest revision of the Serial Port Driver, %J5S03, is now distributed on all BACRES diskettes.
- The contents of the +J5HP and +J5F libraries, present on earlier version of System Manager (BOS), have been moved to the +J5 library.