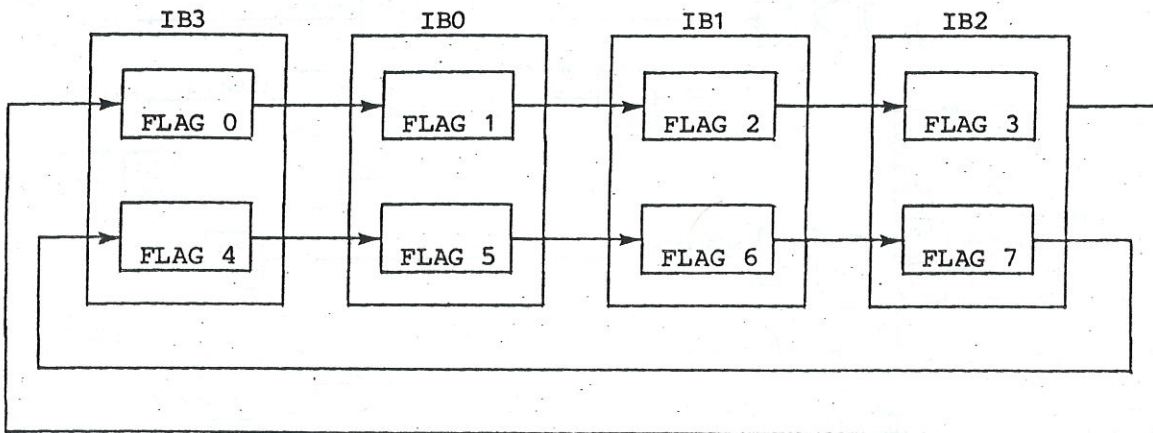## SEMAPHORE FLAGS

The semaphore flags are used to synchronize multiprocessor activity.
There are a total of eight semaphore flags in the background processor
system. These flags are passed through each processors IB module in the
fashion diagramed below.

Instructions 004 through 007 monitor and modify the one flag that the
background status register is pointing at (see background status
register for specific bits).

Example: 004 instruction - Jump to constant parcel if the semaphore flag
is clear and set semaphore.

1. The IB module receives the 004 instruction from the JA module.

2. The IB module generates a 4CP window to view all the semaphore
   flags.

3. The EA module (background port) supplies a copy of the semaphore
   pointer from it's status register.

4. The IB samples the correct semaphore flag.

5. The branch is performed if the flag was clear.
   The branch falls through if the flag was set.

6. The semapore flag is set.