HP 3000 Computer Systems

SERIES 64/68 COMPUTER IMB IOA ADD-ON

Installation Manual



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LIST OF EFFECTIVE PAGES

The List of Effective Pages gives the date of the current edition, and lists the dates of all pages of that edition and all updates. Within the manual, any page changed since the last edition is indicated by printing the date the changes were made on the bottom of the page. Changes are marked with a vertical bar in the margin. If an update is incorporated when an edition is reprinted, these bars and dates remain. No information is incorporated into a reprinting unless it appears as a prior update.

Third Edition.....December 1983

Effective Pages	Date
ATTDEC	1983

PRINTING HISTORY

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First Edition	.MAR	1982
Second Edition		
Third Edition	.DEC	1983

This manual contains instructions for installing a second or third HP 30143A Intermodule Bus I/O Adapter (IMB IOA), on the HP 3000 Series 64/68 Computer. The IMB IOA includes an I/O Buffer (IOB) PCA, an Intermodule Bus Interface (IMBI) PCA, a Common Bus Interface (CBI) PCA, two long 50-pin ribbon cables (P/N 30140-60082), and one short 50-pin cable (P/N 30140-60028).

PROCEDURE FOR INSTALLATION OF A SECOND IMB IOA

The procedure to install a second IMB is as follows:

- 1. Back up the system on magnetic tape or flexible disc.
- 2. Power-down the system.

CAUTION

During the next steps be sure to wear a grounding strap and follow standard ESD precautions when handling PCAs.

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- 3. Install the CBI PCA in slot 22 of the CPU Bay card cage. (Slot 22 is labeled CBI2 as shown in figure 1.)
- 4. Install the IOB PCA in slot 23 of the CPU Bay card cage. (Slot 23 is labeled IOB2.)
- 5. Install the IMBI PCA in slot 8 of the I/O Bay card cage. (Slot 8 is labeled IMBI.)

CAUTION

The IOB cables are fragile and must be handled with care.

- 6. Connect one of the long 50-pin flat ribbon cables from the bottom port of the CBI PCA (slot 22) to the bottom port (J2) of the IMBI PCA (slot 8).
- 7. Connect the second long 50-pin flat ribbon cable from the top port of the CBI PCA (slot 22) to the top port (J1) of the IMBI PCA (slot 8). (Label the cables upper and lower to avoid confusion.)
- 8. Connect the second CBI/IOB PCA pair (slots 22 and 23) together with the short flat ribbon cable.
- 9. Install the appropriate interface PCAs for the I/O channels being added to the new IMB IOA. When the installation is complete, the computer's two-IMB IOA configuration must appear as listed in table 1.
- 10. Power-up the computer.

- 11. Run appropriate diagnostics on the newly installed hardware.
- 12. Coolstart the computer, configuring in the new I/O channels.

Table 1. Two-IMB Configuration

+						
IMB No.	1 (Logical IMB 0)					
SLOT ASSEMBLIES	! CHAN # ! 'TO' DEVICE					
24 IMBI No. 1 23 GIC 22 GIC 21-18* GIC, DEVICE INTERFACES 17* SIB 16-9 AIB	MAG TAPE 3 SYSTEM DISC 4-15 OTHER PERIPHERALS, INPs, ETC. 1 AIB					
IMB No. 2 (Logical IMB 1)						
SLOT ASSEMBLIES	! CHAN # ! 'TO' DEVICE					
8 IMBI No. 2 7-1* GIC, DEVICE INTERFACES, SIB, AIB	1-15 PERIPHERALS, INPs, ETC.					
 Ensure that the GIC and SIB PCAs are always installed within ten physical slots of each other on the same IMB. 						

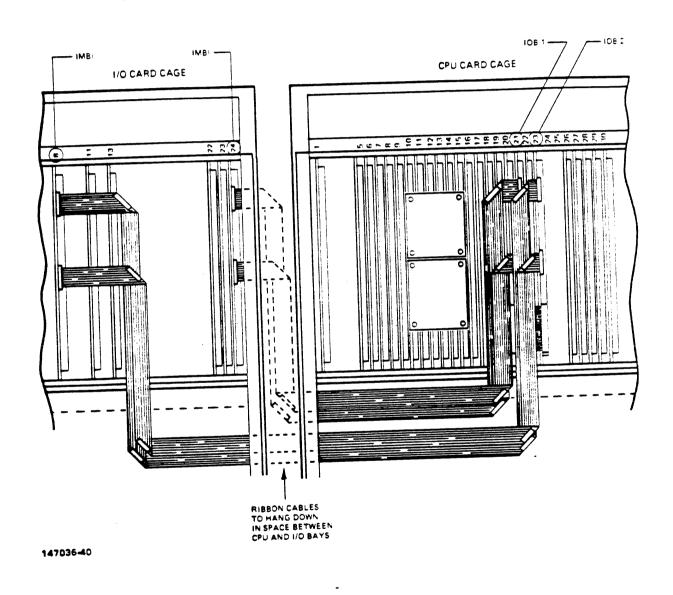


Figure 1. 10B Cable Connection, Second IOA

PROCEDURE FOR INSTALLATION OF A THIRD IMB IOA

The procedure to install a third IMB is as follows:

- 1. Back up the system on magnetic tape or flexible disc.
- 2. Power-down the system.

CAUTION

During the next steps be sure to wear a grounding strap and follow standard ESD precautions when handling PCAs.

- 3. Install the CBI PCA in Slot 24 of the CPU Bay card cage. (Slot 24 is labeled CBI3, as shown in figure 2.)
- 4. Install the IOB PCA in Slot 25 of the CPU Bay card cage. (Slot 25 in labeled IOB 3.)
- 5. Install the IMBI PCA in Slot 24 of the Auxilliary I/O Bay card cage. (Slot 24 is labeled IMBI.)

CAUTION

The IOB cables are fragile and must be handled with care.

- 6. Connect one of the long 50-pin flat ribbon cables from the bottom port of the CBI PCA (Slot 24) to the bottom port (J2) of the IMBI PCA (Slot 24, Auxilliary I/O Bay).
- 7. Connect the second long 50-pin flat ribbon cable from the top port of the CBI PCA (Slot 24) to the top port (J1) of the IMBI PCA (Slot 24, Auxilliary I/O Bay). (Label the cables upper and lower to avoid confusion.)
- 8. Connect the third CBI/IOB PCA pair (Slots 24 and 25) together with the short flat ribbon cable.
- 9. Install the appropriate interface PCAs for the I/O channels being added to the new IMB IOA. When the installation is complete, the computer's three-IMB IOA configuration will appear as in Table 2.
- 10. Power-up the computer.
- 11. Run appropriate diagnostics on the newly installed hardware.
- 12. Coolstart the computer, configuring in the new I/O channels.

Table 2. Three-IMB Configuration

1	IMB No.	1	(Logica	I IMB 0)
: SLOT ! A	ISSEMBLIES	1	CHAN # 1	"TO" DEVICE
23 0 22 0 21-18* 0	GIC, DEVICE INTERFACES GIB			MAG TAPE SYSTEM DISC OTHER PERIPHERALS, INPs, ETC. AIB
++ -1	IMB No.	2	(Logica	1 IMB 1)
SLOT	ASSEMBLIES	 	CHAN # !	'TO' DEVICE
1 7-1* 1 G	IMBI No. 2 IC, DEVICE NTERFACES, IB, AIB	1	1-15 -15	PERIPHERALS, INPs, ETC.
++	liary Card C	-+ ag	e, IMB	do. 3 (Logical IMB 2)
! SLOT !	ASSEMBLIES	-+	CHAN #	'TO'' DEVICE
1 9-23 6	MBI No. 3 FIC,DEVICE NTERFACES, SIB, AIB	-+ 	1-15	PERIPHERALS, INP, ETC.
! ins	sure that the stalled withiner on the sa	n.	ten phys	IB PCAs are always ical slots of each

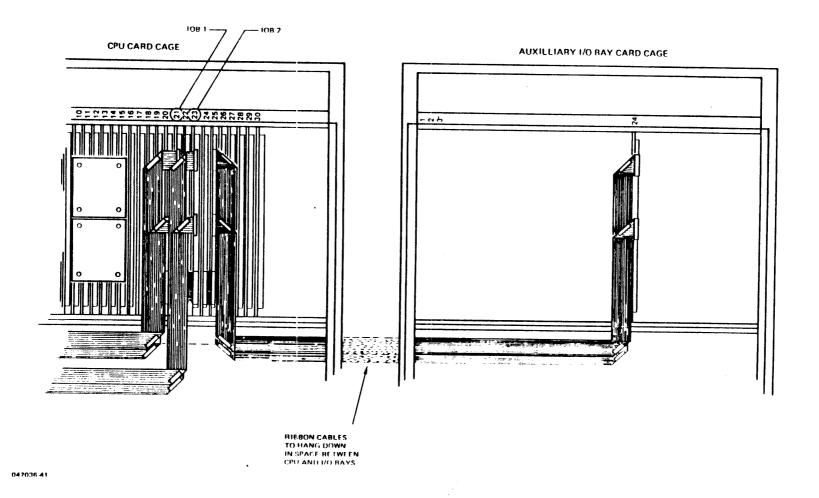


Figure 2. IOB Cable Connection, Third IOA