ESCALA
PCI Expansion Drawer
Quick Set Up

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86 A1 32PX 02

Introduction

This leaflet describes how to connect the PCI expansion drawer to the CPU drawer.

It is supposed that the rack system is already set up. In case it is not, refer to the *Rack Service Guide* for instructions.

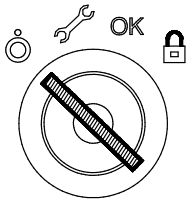
The operations described in this leaflet must be performed by people trained to perform service tasks on the system.

Hardware Set Up Procedure

Preliminary Operations

1. **Power off the CPU drawer.**

- If the CPU drawer is running, perform a system shutdown.
- Power off the CPU drawer by turning the key mode switch to the Power Off position.



2. **Switch off all the external devices and drawers connected to the CPU drawer, if any.**

Note: If they are shared in High Availability configuration, they must not be powered off.

3. **Switch off the circuit-breaker of the PDU outlet, where the CPU drawer power cord is connected; unplug the power cord of the CPU drawer from the dedicated receptacle at the CPU drawer rear.**
4. **Check that all the on-board LED's are set to OFF before performing any operation on the system.**

5. **Install the KBR card(s) into the CPU drawer.**

The KBR card(s) must be installed in mandatory positions:

- ESCALA EPC400
  1st KBR CPU drawer PCI slot #5
  2nd KBR CPU drawer PCI slot #3
- ESCALA EPC430 and EPC450
  1st KBR CPU drawer PCI slot #5
  2nd KBR CPU drawer PCI slot #4

If these positions are already occupied, remove the installed controllers and install them in other available slots. Refer to the CPU drawer base documentation set for the configuration rules and installation and removal procedures.

Note: The second KBR card is present only in case of full PCI expansion drawer configuration (two KPE planars, for a total of twelve PCI slots).

PCI Expansion Drawer Installation

If the PCI expansion drawer is to be installed in the rack, go to step 6.

If the PCI expansion drawer is already installed in the rack, go to step 8.

6. **Unpack and check the PCI expansion drawer.**
7. **Install the PCI expansion drawer into the rack chassis.**

- Up to one PCI expansion drawer can be connected to a CPU drawer.
- Locate the rack area designated to house the PCI expansion drawer, according to the configuration rules described in the CPU drawer base documentation set **Configuring the System** section.
- Perform the installation procedure, the same applied for the CPU drawer, as described in the *Rack Service Guide.*
- The PCI expansion drawer houses the same type of disks of the CPU drawer it is connected to:
  ULTRA/SE for ESCALA EPC400
  ULTRA-2/LVD for ESCALA EPC430 and EPC450.

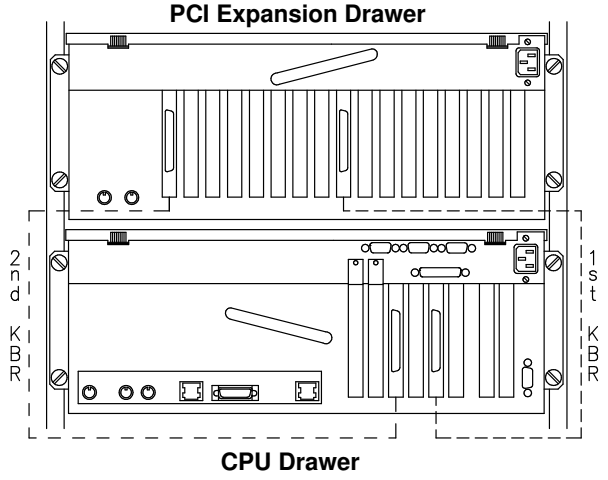
CAUTION:

Take care in handling the PCI expansion drawer. At least two persons are required to move it, to prevent it from incidental fall, and to avoid human accidents.

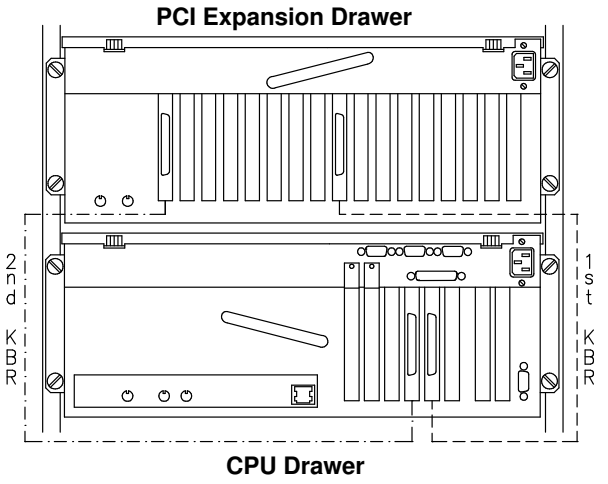
Note: In case any cable connected to the CPU drawer make the PCI expansion drawer sliding operation difficult, record which connector attaches to which cable and disconnect the cables.

8. **Connect the KBR card(s) of the CPU drawer to the corresponding KXB card(s) of the PCI expansion drawer, through the PCI external connection cable(s).**

EPC400 PCI expansion drawer connection:



EPC430 / EPC450 PCI expansion drawer connection:

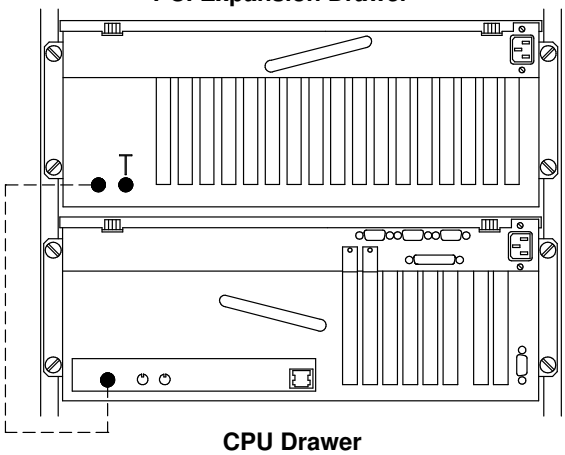


9. **Connect the RS-485 cable from the CPU drawer to the PCI expansion drawer.**

The PCI expansion drawer power is controlled through an RS-485 connection (Remote Control).

- Connect the RS-485 cable from the CPU drawer to the PCI expansion drawer as shown in the figure below
- The RS-485 terminator must be connected to the RS-485 output connector of the PCI expansion drawer.

PCI Expansion Drawer



CPU Drawer

10. **Connect the power cord to the power receptacle on the rear of the PCI expansion drawer.**
11. **Choose a free PDU outlet, where the PCI expansion drawer power cord will be connected. Make sure the relevant circuit-breaker is set to OFF.**
12. **Connect the PCI expansion drawer power cord to the chosen PDU outlet, then set the relevant circuit-breaker to ON.**
13. **Connect the power cord to the power receptacle on the rear of the CPU drawer.**
14. **Set the circuit-breaker of the CPU drawer located on the PDU outlet to ON.**

Warning: Do not connect the CPU drawer and the PCI expansion drawer to a power source other than the PDU.

15. **Secure the cables at the back of the drawer, along the side of the rack, using the dedicated cable retainers.**

16. **Switch on the external devices and drawers connected to the CPU drawer, if any.**
17. **Assign the logical number to the PCI expansion drawer.**

If the BUMP console is available, perform the following steps, otherwise go to step c.

a. Switch on the BUMP console.

b. Check the firmware levels, entering the **`Stand-By Menu`** from the BUMP console:

   Press the ENTER key
   Type **`sbb`**
   Select **`DISPLAY CONFIGURATION`**

   The indicated BUMP, INITFW, OPENFW levels must be:

   ESCALA EPC400 **higher than 03.01.09**
   ESCALA EPC430 **higher than F0.04.00**
   ESCALA EPC450 **higher than F0.05.00**.

   If the firmware levels are lower than required, it is necessary to perform a firmware updating. In this case, go to step c.

   If the firmware levels are equal or higher than required, you only need to assign a number to the new drawer. From the **`Stand-By Menu`**:

   Select **`SET UNIT NUMBER`**

   The unit number is automatically assigned. Go to step18.

c. Re-load the firmware.

   Update the firmware with the adequate firmware level (check the label on the diskette), as described in the *Firmware Loading Instruction* document, delivered with the firmware diskette.

18. **Power on the system.**

Power on the system by turning the key mode switch of the CPU drawer to the Normal position (use the Service position, if you want to enter the operating system diagnostic mode).

When the system is up and running, you may need to perform some software operations to use the new available components. Refer to the operating system documentation.

More Information about the PCI Expansion Drawer

Information about the configuration rules, in terms of device and controller cards, can be found in the CPU drawer base documentation set, **Configuring the System** section.

Information about the installation and/or removal procedures of devices and controllers can be found in the CPU drawer base documentation set, **Expanding the System Configuration** section.

Service information, such as hardware component description and replacement, cabling information and spare part list, is included in the *PCI Expansion Drawer Service Guide* (86 A1 33PX). This guide is reserved to people trained to perform service tasks on the system and can be ordered to the system supplier.

Information about the drawer installation procedure is included in the *Rack Service Guide* (86 A1 20PX).