Addendum Expanding the RAM

This addendum describes how to add RAM memory to the following Axis CD-ROM Servers:

- AXIS StorPoint CD
- AXIS StorPoint CD/T

Memory modules

The required memory expansion modules are 72 pin SO-DIMM Modules (no parity). They may be either 4 Mbyte or 16 Mbyte in size and up to two expansion modules may be added. Where two memory expansion modules are used they must be of equal size. The modules should be mounted in the positions indicated as X5 and X6 on the drawing of the StorPoint CD Printed Circuit Board (PCB) on page 4. Specifications for the expansion modules are given below.

4 Mbyte Modules

5 volts, based on 1*16 Mbyte chips, CAS before RAS refresh, Fast Page Mode capability, 1 kbyte refresh. Use the modules mentioned below or equivalent.

Manufacturer	Type
Toshiba	THL321050ATG-6 (1M*32, 60 ns)
Enhanced Memory Products	EDM0132G-6H (1M*32, 60 ns)

16 Mbyte Modules

5 volts, based on 4*4 Mbyte chips, CAS before RAS refresh, Fast Page Mode capability, 2 kbyte refresh. Use the modules mentioned below or equivalent.

Manufacturer	Type
Toshiba	THL324010B/CTG-6 (4M*32, 60 ns)
Enhanced Memory Products	EDM0432G-6H (4M*32, 60 ns)

16 Mbyte modules can be delivered from Axis using the following part number:

Part No	Description
14799	16MB SO-DIMM Module

PLD chip to be added

In order to expand the memory a PLD (Programmable Logic Device) with Part No. 15296 is required. This should be mounted in the position indicated as D22 on the drawing of the StorPoint CD Printed Circuit Board (PCB) on page 4.

The PLD is delivered from Axis and can be ordered in packages of 1 or 6 chips according to the following part numbers.

Part No	Description
15249	PLD - package with 1 (one) chip
15250	PLD - package with 6 (six) chips

Possible Memory Configurations

The options for configuring the server memory are outlined below. Please note that the StorPoint CD continues to use the original 2 Mbytes RAM if the total memory extension is 4 Mbytes. If the total memory extension exceeds 4 Mbytes the original 2 Mbytes RAM are no longer used.

Position D9 Original RAM	Position D22	Position X5 (DIMM-A)	Position X6 (DIMM-B)	Used Memory
2 Mbyte				**2 Mbytes**
2 Mbyte	PLD	4 Mbyte		**6 Mbytes**
2 Mbyte	PLD		4 Mbyte	**6 Mbytes**
2 Mbyte	PLD	16 Mbyte		**16 Mbytes**
2 Mbyte	PLD	16 Mbyte	16 Mbyte	**32 Mbytes**

Options for configuring the RAM of the StorPoint CD.

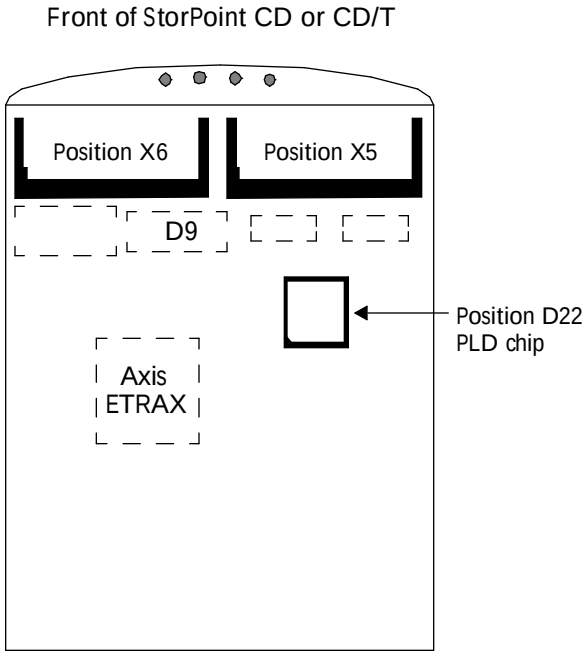
Installation Instructions

Caution

- ❑ Always use an antistatic bracelet when handling the memory and PLD chips.

1. Unplug the power supply from the StorPoint CD.
2. Remove the server casing.
3. Identify position D22 as indicated on the StorPoint PCB drawing on page 4.
4. Mount the PLD. Please note that one of the corners is cant in order to prevent incorrect mounting of the chip.

5. Identify positions X5 and X6 as indicated on the StorPoint PCB drawing below.
6. Mount the first DIMM module by sliding it into one of the sockets at an angle of 45 degrees. Once the DIMM is fully inserted press it downwards, towards the StorPoint PCB, until the socket locks the module into place.
   Please note that the module edge is cut away at one corner only, in order to ensure correct mounting in the socket.
7. Repeat steps 5 and 6 for the second DIMM if required.
8. Assemble the StorPoint CD, i.e. replace the casing.
9. Power up the CD-ROM server. The new memory modules are automatically identified and the usage optimized by the StorPoint CD.



The PCB of the AXIS StorPoint CD.