DECpc 433dxLP

CPU Specifications

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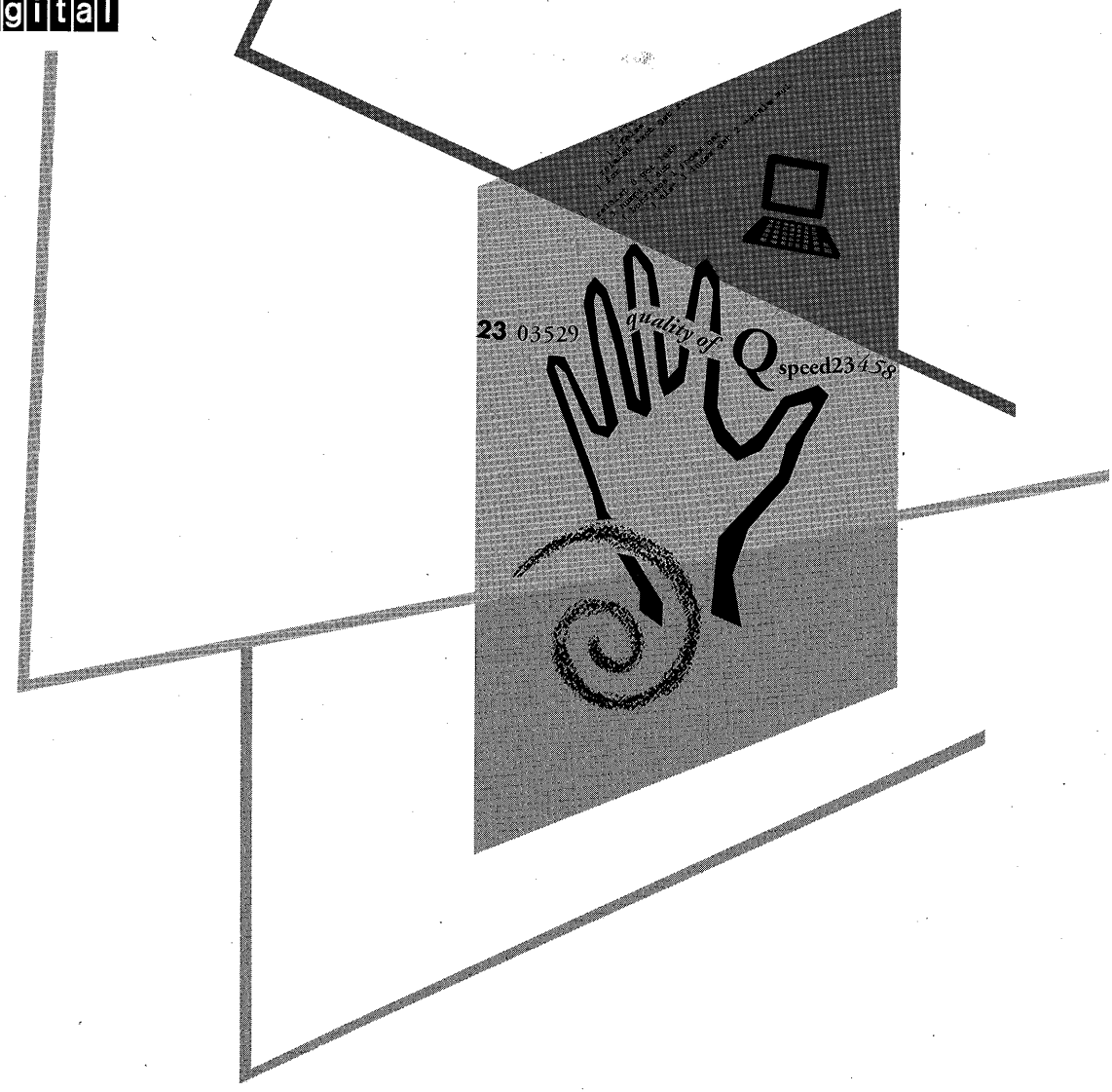

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CPU Specifications

Introduction

Your DECpc 433dxLP personal computer is equipped with a 33 MHz Intel486DX microprocessor. The microprocessor and related computer performance functions are located on a CPU module connected to the main logic board inside your computer. Features of the DECpc 433dxLP include:

- Intel486DX CPU operating at 33 MHz
- Standard 128 KB secondary cache memory, optionally expandable to 256 KB
- Vacancy socket for future CPU upgrades

The remainder of this CPU Specifications Booklet describes the expansion capabilities and related jumper configuration information for the DECpc 433dxLP CPU module.

WARNING

Always turn off power to the computer and disconnect the power cord prior to removing the computer's outside cover. Refer to the DECpc 300/400 LP Series User's Guide for cover removal instructions.

CAUTION

Static electricity can damage electronic components. Before handling or installing any electronic device such as a math coprocessor, CPU module, or cache memory chips, you must discharge any built up static electricity by touching a grounded metal object.

Expansion Sockets and Jumper Locations

The following illustration shows the location of the vacancy socket (Figure 1,B) and 128 KB secondary cache memory upgrade sockets (Figure 1,A). Also shown are jumper pin locations and factory default settings (refer to Table 1). Note that the square pin of each jumper block is pin 1.

Table 1. 433dxLP CPU Module Jumper Settings

Feature	Description	Setting
Vacancy socket	Empty or Intel OverDrive microprocessor installed	J101, pins 1 and 2 jumpered(1) J102, pins 1 and 2 jumpered(1) J113, pins 1 and 2 jumpered(1)
	Intel486DX or Intel486 DX2 microprocessor installed	J101, pins 2 and 3 jumpered J102, pins 2 and 3 jumpered J113, pins 2 and 3 jumpered
Cache size	128 KB cache	J103, pins 1 and 2 jumpered(1) J104, pins 1 and 2 jumpered(1)
	256 KB cache	J103, pins 2 and 3 jumpered J104, pins 2 and 3 jumpered
CPU clock input	25 MHz 33 MHz(1) 40 MHz 50 MHz	J109, pins 1 and 2 open J110, pins 1 and 2 jumpered(1) J111, pins 1 and 2 open J112, pins 1 and 2 open
CPU Type select	486 dx, dx2	J114, pins 1 and 2 jumpered(1) J115, pins 1 and 2 jumpered(1)
	486 sx	J114, Pins 2 and 3 jumpered J115, Pins 2 and 3 jumpered

(1) Factory setting

NOTE

Jumper pins J114 and J115 are for factory use only and may not exist in all CPU modules.

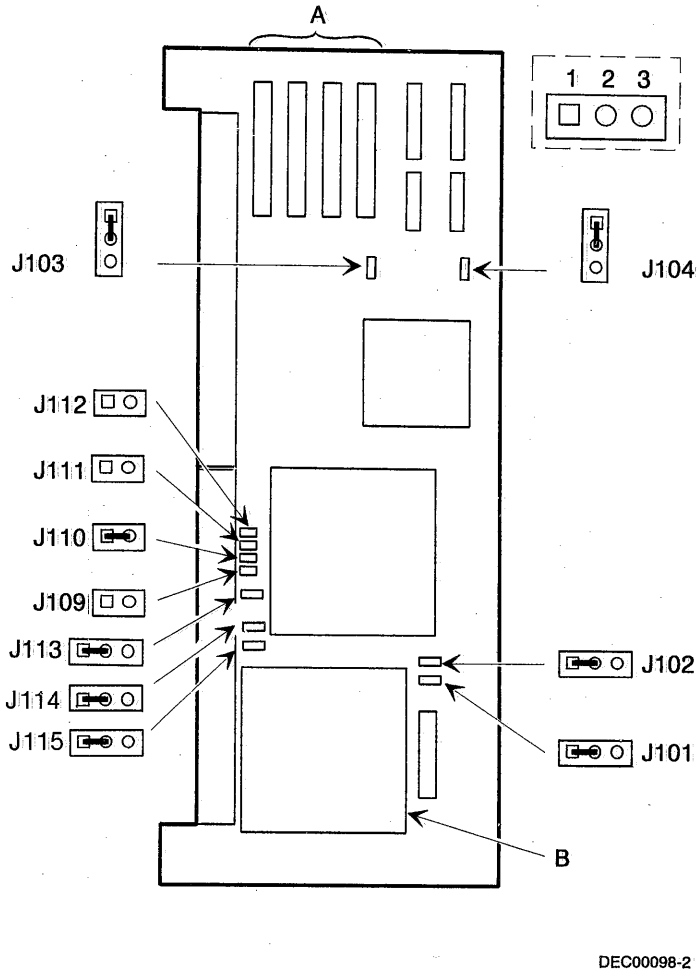

Figure 1. 433dxLP CPU Module

Vacancy Socket

Your DECpc 433dxLP CPU module is equipped with a vacancy socket for installing a higher performance Intel microprocessor chip as your computing needs increase, a higher performance Intel microprocessor chip.

Installing a higher performance Intel microprocessor will provide a cost effective means of improving the performance of your computer as advanced technology becomes available. Contact your Digital sales representative for performance upgrade chip offerings.

CAUTION

Make sure the microprocessor pin 1 location is properly aligned with the pin 1 location on the socket (see Figure 2,A). Improper installation can damage the microprocessor chip.

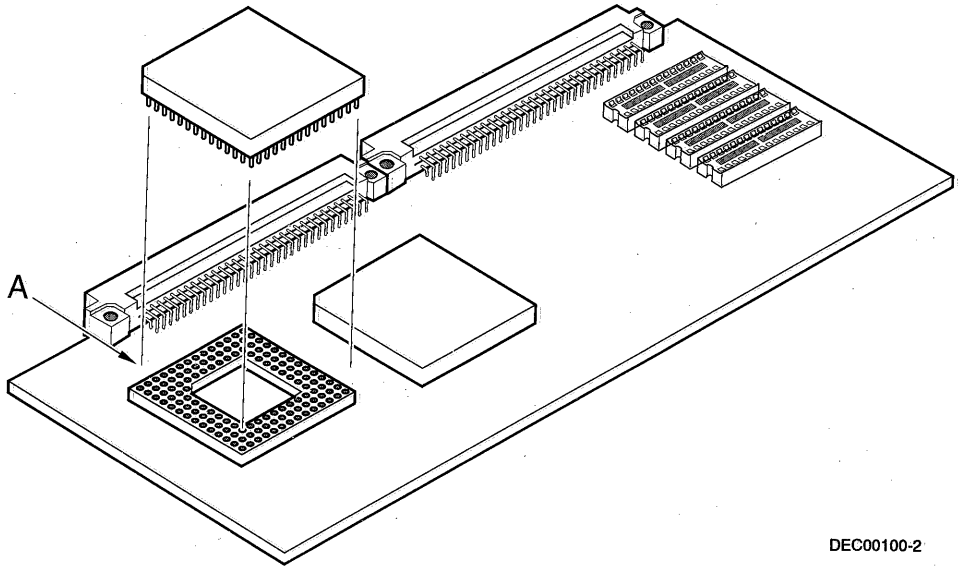

Figure 2. Microprocessor Chip Pin 1 Location

Secondary Cache Memory

Your DECpc 433dxLP CPU module is equipped with 128 KB direct-mapped adaptive write back secondary cache memory. The secondary cache memory is designed to improve the performance of the microprocessor on the CPU module.

An additional 128 KB cache memory option is available to increase secondary cache memory to 256 KB. This kit consists of four 20 ns 32 KB × 8 SRAM DIP chips installed in sockets provided on the CPU module. See Figure 3 for optional cache memory installation information and Figure 1 for jumper locations.

CAUTION

Make sure each SRAM chip pin 1 location is properly aligned with the pin 1 location on the socket (see Figure 3,A). Improper installation may cause faulty computer operation.

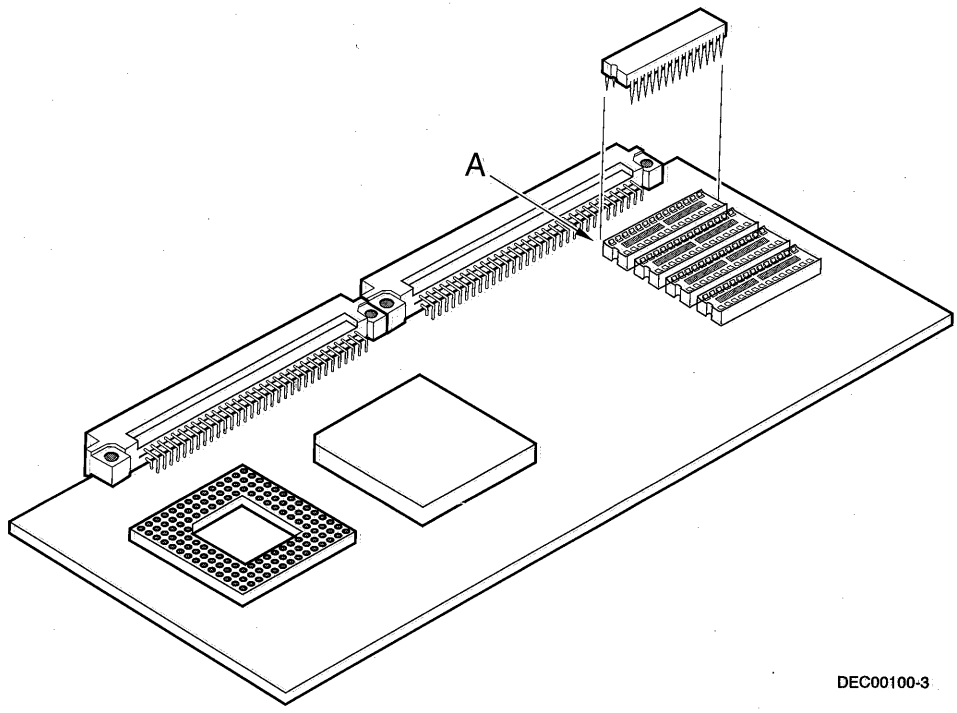

Figure 3. Cache Memory Chip Pin 1 Location

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