FRONT

PICTURE 1

PS/ValuePoint Type 6387 Supplement

May 1993

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Part Number 71G1875
Form Number S71G-1875-00

1.0 Type 6384 & 6384 /D Parts

PICTURE 2

Index	System Unit		
1	Top Cover Assembly (6384)	52G8740	
1	Top Cover Assembly (6382 /S)	92F0414	
1	Top Cover Assembly (6384 /D)	92F0410	
	Logo	52G8743	
	Front Bezel w/ labels (6384)	52G8742	
	Front Bezel w/ labels (6382 /S)	92F0417	
	Front Bezel w/ labels (6384 /D)	92F0413	
	Foot (1)	93F2386	
2	Riser Card (6384)	93F2396	
2	Riser Card (6382 /S)	92F0391	
2	Riser Card (6382 (386SLC only))	93F2393	
2	Riser Card (6384 /D)	92F0392	
	Riser Card Support (6382 /S)	61G2175	
	Riser Card Support (6384 /D)	61G2176	
	Power Graph X-24 Adapter	60G9697	
3	System Boards (6384)		
	386SLC, 2MB	52G8751	
	486SX, w/o memory	60G9713	
	486DX 33, w/o memory	60G9712	
	486DX2 33/66, w/o memory	60G9711	
3	System Boards (6382 /S & 6384 /D)		
	386SLC, 2MB	52G8751	
	425SX, w/o memory	92F0394	
	433SX, w/o memory	92F0388	
	433DX, w/o memory	92F0396	
	466DX2, w/o memory	92F0395	
	Lithium Battery - CR2032	33F8354	
	L2 Cache 128KB	92F0397	
	L2 Cache 256KB	92F0398	
	Video DRAM, 1MB	60G2951	
	Jumper, 2 position - 4 pack	93F0067	
	EMC Clips - 6 pack	61G2173	
4	145 W Power Supply (6384)	52G8741	
4	100 W Power Supply (6382 /S)	92F0415	
4	200 W Power Supply (6384 /D)	92F0411	
5	Hard Disk Cable (6384)	52G8749	
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5	Diskette Drive Cable (6384)	52G8748	
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7	Base Frame Assembly (6384) (R)	52G8750	
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	Cover Lock w/ pawl	52G8744	
	Adapter Card Guides (2)	52G8746	
	Speaker	92F0421	
8	LED and Cable, Power	93F2389	
9	LED and Cable, Hard Disk Drive	93F2388	
10	30-Pin memory module, 1MB	93F0058	
	30-Pin memory module, 4MB	96F9289	
	72-Pin memory module, 1MB	90X8624	
	72-Pin memory module, 2MB	92F0103	
	72-Pin memory module, 4MB	92F3337	
	72-Pin memory module, 8MB	64F3607	
	72-Pin memory module, 16MB	60G2950	
12	5.25-in. Blank Bezel	52G8745	
12	3.5-in. Blank Bezel	92F0419	

Communication Adapters		
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	Ethernet Adapter (coaxial)	92F0387
	Token Ring Adapter	03F0212

Index	DASD	
6	5.25-in. 1.2MB Drive (optional)	93F2362
	80MB Hard Disk Drive	95F4721
	120MB Hard Disk Drive	92F0256
	170MB Hard Disk Drive	95F4728
	212MB Hard Disk Drive	93F0118
	245MB Hard Disk Drive	92F0403
	340MB Hard Disk Drive	92F0404
	527MB Hard Disk Drive	92F0405
11	3.5-in. 1.44MB Diskette Drive	93F2361
	3.5-in DASD Tray (6382 /S)	61G2175

DASD Tray and Riser Support (6384 & 6384 /S)	61G2176
Mounting Screws (4)	93F0041

Displays

6312 Color Display

90/137 V ac (U.S. and Canada)	39G3321
180/264 V ac (Northern Hemisphere)	39G3322
180/264 V ac (Equatorial)	39G3323
180/264 V ac (Southern Hemisphere)	39G3494
Tilt/Swivel	39G3496
Display Power Cord	38F3908

6314 Color Display

98/264 V ac (U.S. and Canada)	39G3352
98/264 V ac (Northern Hemisphere)	39G3353
98/264 V ac (Equatorial)	39G3454
98/264 V ac (Southern Hemisphere)	39G3498
Tilt/Swivel	39G3502
Signal Cable	39G3331
Display Power Cord	38F3908

6317 Color Display

98/264 V ac (U.S. and Canada)	39G3359
98/264 V ac (Northern Hemisphere)	39G3360
98/264 V ac (Southern Hemisphere)	39G3361
Display Power Cord	38F3908

6319 Color Display

98/264 V ac (U.S. and Canada)	39G3385
98/264 V ac (Northern Hemisphere)	39G3386
98/264 V ac (Equatorial)	39G3387
98/264 V ac (Southern Hemisphere)	39G3500
Tilt/Swivel	39G3503
Signal Cable	39G3331
Display Power Cord	38F3908

Subtopics
1.1 433DX & 466DX2 System Board
1.2 6382 /S and 6384 /D System Boards

1.1 433DX & 466DX2 System Board

BT1	Battery
C17	Capacitor (Used with JP8 to erase password.)
J2	External Battery
J3	Power Connector
J4	Serial Port (Comm A)
J5	Serial Port (Comm B)
J6	Diskette Connector
J7	Parallel Port
J8	Hard Disk Connector
J9	Keyboard Connector
J10	Mouse Port
J11	Hard Disk LED (pin 4 and 5) Power On LED (pin 1 and 2)
J12	Riser Connector
J15	Video Feature Connector
J16	Video Port
J45	Memory-Module Socket Bank 0, 0
J46	Memory-Module Socket Bank 0, 1
J47	Memory-Module Socket Bank 0, 2
J48	Memory-Module Socket Bank 0, 3
J49	Memory-Module Socket Bank 1, 0
J50	Memory-Module Socket Bank 1, 1
J51	Memory-Module Socket Bank 1, 2
J52	Memory-Module Socket Bank 1, 3
JP4	BIOS Select
JP8	Battery Select
JP10	VGA Enable
JP17	VGA Enable
JP20	Beeper Enable
JP200	Cache Configuration
JP201	Cache Configuration
JP206	Cache Configuration
JP207	Cache Configuration
JP209	Mouse Enable
JP305	IRQ9
U300	486DX or 486DX2 Processor

Note: Jumpers should be set as shown.

1.2 6382 /S and 6384 /D System Boards
(425SX, 433SX, 433DX, or 466DX2)

PICTURE 3

PICTURE 4

Figure 1. 6382 /S and 6384 /D

Subtopics
1.2.1 6382 /S and 6384 /D System Boards

1.2.1 6382 /S and 6384 /D System Boards
(425SX, 433SX, 433DX, or 466DX2)

BT1	Battery
J1	Power Connector
J2	Diskette Connector
J3	Hard Disk Connector
J4	Keyboard Connector
J5	BootBlock (not used: do not change)
J6	Write Disable
J7	Serial Port (Comm A)
J8	Mouse Port
J9	Password Bypass
J10	Processor Upgrade
J11	Processor Upgrade
J12	Serial Port (Comm B)
J13	Riser Connector
J14	Parallel Port
J15	Video Port
J16	Monochrome Adapter
J17	System Board Video Enable
J18	Memory-Module Socket, MEM 1
J19	Memory-Module Socket, MEM 2
J20	Memory-Module Socket, MEM 3
J21	Memory-Module Socket, MEM 4
J23	Power On LED
J24	Hard Disk LED
J25	Speaker
J26	Video Feature Connector
U9	486SX Processor
U10	486DX or 486DX2 Processor Upgrade Socket
U13	Cache Socket
U25	Riser Connector Extension

Note: Jumpers should be set as shown.

2.0 System Board Connector Assignments

Subtopics
2.1 Display/Signal
2.2 Power

2.1 Display/Signal

Pin	Signal Name	I/O
1	Red Video	O
2	Green Video	O
3	Blue Video	O
4	Monitor ID Bit 2	I
5	Sync Ground	
6	Red Ground	
7	Green Ground	
8	Blue Ground	
9	No Connection	
10	Sync Ground	
11	Monitor ID Bit 0	I
12	Monitor ID Bit 1	I
13	Horizontal Sync	O
14	Vertical Sync	O
15	Monitor ID Bit 3	I

2.2 Power

Pin	Signal Name
1	Power Good (+5 V dc)
2	+5 V dc
3	+12 V dc
4	-12 V dc
5	Ground
6	Ground
7	Ground
8	Ground
9	-5 V dc
10	+5 V dc
11	+5 V dc
12	+5 V dc

3.0 Product Description

Type 6387 /T computers contain eight I/O adapter card slots and six drive bays. The drive bays can support diskette drives, hard disk drives, or CD-ROM drives.

- **Security**

  - Power-on password

- **System Board**

  Models 433DX /T and 466DX2 /T:

  - DX and DX2 models have a built-in math coprocessor
  - Supports 8KB internal cache and 128KB or 256KB external cache. (466DX2 /T has 128KB external cache standard and is field upgradeable to 256KB. 433DX /T has no standard external cache, but is field upgradeable to 128KB or 256KB external cache.)
  - RAM is installed directly onto the system board using industry standard, 72-pin, 70 to 85 ns memory modules. There are four sockets to allow a maximum of 64 MB. 2MB, 4MB, 8MB, and 16MB memory modules are supported. Refer to "System Memory" in topic 6.0
  - 1 MB of Video memory (DRAM) is soldered on the system board. Two video DRAM sockets allow a maximum of 2MB of video DRAM
  - Ports include: two serial, parallel, keyboard, mouse, and video
  - Connectors for AT riser card (120-pin with a 112-pin local bus extension), input power (12-pin), AT diskette drives (34-pin), AT hard disk drives (40-pin), power LED (2-pin), hard disk LED (2-pin), speaker (2-pin), and video feature (26-pin)
  - Lithium battery

- **Power Supplies** (with CPU power switch)

  - A 200-W universal voltage power supply with fan and a connector for a detachable grounded 3-wire power cord. The power cable has six DASD connectors; one 3.5-inch diskette drive minipower connector, and five standard 4-pin power connectors.

    When the system is powered off for 10 seconds or more and then powered on, the power supply generates a "power good" signal that resets the system logic.

- **Cables**

  One signal cable for hard disk drives and one cable for diskette drives

- **Diskette Drives**

  3.5-inch 1.44MB Slimline diskette drive in all models

- **Hard Disk Drives**

  Hard disks are 3.5-inch Slimline AT drives.

  - 340MB with 96KB of "look-ahead" cache
  - 527MB with 256KB of "look-ahead" cache

- **Keyboard**

  Enhanced 101- or 102-key keyboard
  with 1.8 m (6 ft.) cable

- **Mouse** with 1.8 m (6 ft.) cable

4.0 Specifications

(Minimum configuration)

System Unit Size:

- Width: 187 mm (7.4 in.)
- Depth: 429 mm (16.9 in.)
- Height: 413 mm (16.3 in.)

System Unit Weight:

- 11.4 kg (25 lb)

Environment:

- Temperature, System Unit and Display
  - Power on: 10 to 32 degrees C (50 to 95 degrees F)
  - Power off: 10 to 43 degrees C (50 to 110 degrees F)
- Humidity, System Unit and Display
  - Power on: 8% to 80%
  - Power off: 8% to 80%
- Maximum altitude: 2134 m (7000 ft.)

Heat output:

- 934 Btu/hr (maximum configuration)

Electrical:

- Input voltage (sinewave input is required)
  - Low Range
    - Minimum: 90 V ac
    - Maximum: 137 V ac
  - High Range
    - Minimum: 180 V ac
    - Maximum: 265 V ac

5.0 Power-On Password

A power-on password denies access to the system by an unauthorized user when the system is powered on. When a power-on password is active, the password prompt appears on the screen each time the system is powered on. The system starts after the proper password is entered.

Subtopics
5.1 Removing a Power-on Password

5.1 Removing a Power-on Password

To service a system with an active and unknown power-on password, power-off the system and do the following:

Note: Remember to remind the user to enter a new password when service is complete.

- Models 433DX /T and 466DX2 /T:

  1. Move the jumper on J9 so that it connects the center pin and the pin on the opposite end of the connector.
  2. Power-on the system unit. The password is erased from memory. (Leave the jumper in that position until the next time you need to remove the password.)

6.0 System Memory

Models 433DX /T and 466DX2 /T do not have RAM soldered on the system board. (All these models use the same system board identifiable by the riser card extension.) Four 72-pin sockets are available to add memory modules. Memory modules supported are 2MB, 4MB, 8MB, and 16MB. Memory module speed supported is from 70 ns to 85 ns. Sockets can accept either size and speed.

7.0 System Unit Exploded View

PICTURE 5

8.0 Parts

PICTURE 6

Index	***Type 6387 System Unit***	
1	Side Cover Assembly	61G2169
	Logo	52G8743
	Front Bezel w/ labels	61G2170
	Power Button	61G3205
	Foot (4)	93F2386
2	LED and Cable, Power	93F2389
3	LED and Cable, Hard Disk Drive	93F2388
4	(See DASD)	
5	Blank Drive Bezel	61G2171
6	Hard Disk Drive Cable	92F0424
6	Diskette Drive Cable	92F0423
7	Adapter Card Guide	61G2173
8	Base Stand	61G2174
9	System Boards	
	433DX, w/o memory	92F0396
	466DX2, w/o memory	92F0395
	72-Pin memory module, 2MB	92F0103
	72-Pin memory module, 4MB	92F3337
	72-Pin memory module, 8MB	64F3607
	72-Pin memory module, 16MB	60G2950
	Lithium Battery - CR2032	33F8354
	L2 Cache 128KB	92F0397
	L2 Cache 256KB	92F0398
	Video DRAM, 1MB	60G2951
	Jumper, 2 position - 4 pack	93F0067
	EMC Clips - 6 pack	61G3206
10	Riser Card	92F0393
11	Riser Card Support Clip	61G2365
12	Cover Lock w/ pawl	61G2177
13	200 W Power Supply	92F0411
14	Base Frame Assembly	92F0422
	Speaker	92F0421

Index	***DASD***	
4	3.5-in. 1.44MB Diskette Drive	93F2361
	3.5-in. Diskette Drive Bezel	61G2172
	DASD Tray and Riser Support Bracket	93F2387
	Mounting Screws (4)	93F0041
	5.25-in. 1.2MB Diskette Drive (optional)	93F2362
	5.25-in. Diskette Drive Bezel	61G2171
	DASD Tray	61G3207
15	340MB Hard Disk Drive	92F0404
15	527MB Hard Disk Drive	92F0405

Communication Adapters	
Ethernet Adapter (twisted pair)	92F0386
Ethernet Adapter (coaxial)	92F0387
Token Ring Adapter	03F0212

Subtopics
8.1 6387 /T System Boards

8.1 6387 /T System Boards
(433DX or 466DX2)

PICTURE 7

PICTURE 8

Figure 2. 6387 /T

Subtopics
8.1.1 6387 /T System Boards

8.1.1 6387 /T System Boards
(433DX or 466DX2)

BT1	Battery
J1	Power Connector
J2	Diskette Connector
J3	Hard Disk Connector
J4	Keyboard Connector
J5	BootBlock (not used: do not change)
J6	Write Disable
J7	Serial Port (Comm A)
J8	Mouse Port
J9	Password Bypass
J10	Processor Upgrade
J11	Processor Upgrade
J12	Serial Port (Comm B)
J13	Riser Connector
J14	Parallel Port
J15	Video Port
J16	Monochrome Adapter
J17	System Board Video Enable
J18	Memory-Module Socket, MEM 1
J19	Memory-Module Socket, MEM 2
J20	Memory-Module Socket, MEM 3
J21	Memory-Module Socket, MEM 4
J23	Power On LED
J24	Hard Disk LED
J25	Speaker
J26	Video Feature Connector
U10	486DX or 486DX2 Processor Upgrade Socket
U13	Cache Socket
U25	Riser Connector Extension

Note: Jumpers should be set as shown.