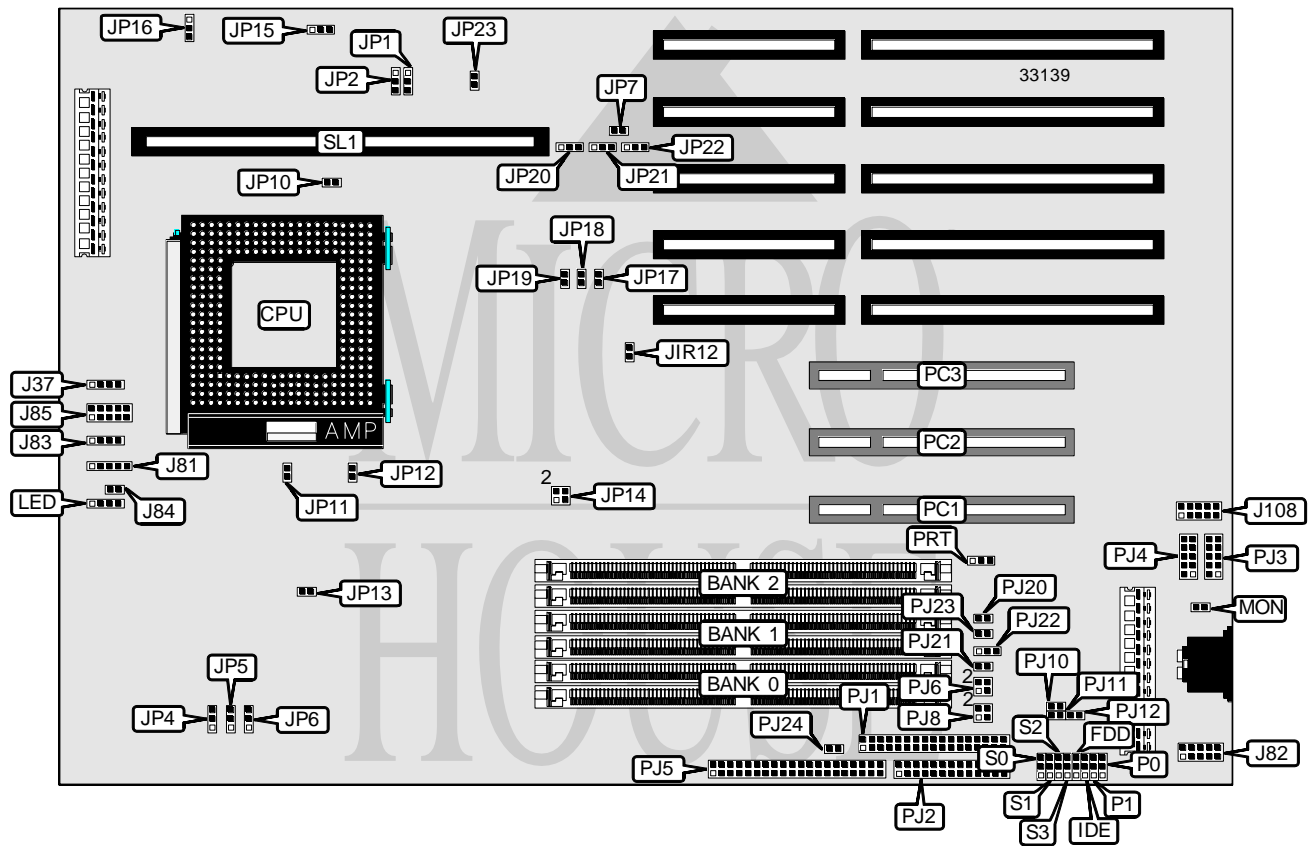


# CSS LABORATORIES, INC.

## PREFERRED 590 PCI ESP SYSTEMS, MB-5861

|                          |   |
|--------------------------|---|
| <b>Processor</b>         | Pentium   |
| <b>Processor Speed</b>   | 75/90/100MHz  |
| <b>Chip Set</b>          | Intel   |
| <b>Max. Onboard DRAM</b> | 384MB   |
| <b>Cache</b>             | 256/512KB   |
| <b>BIOS</b>              | Unidentified  |
| <b>Dimensions</b>        | 330mm x 218mm   |
| <b>I/O Options</b>       | 32-bit PCI slots (3), floppy drive interface, parallel port, PS/2 mouse interface, serial ports (2), cache clot |
| <b>NPU Options</b>       | None  |



| CONNECTIONS                  |                |                             |           |
|------------------------------|----------------|-----------------------------|-----------|
| Purpose                      | Location       | Purpose                     | Location  |
| Speaker                      | J37            | IDE interface LED           | LED       |
| Power LED & keylock          | J81            | Non green monitor connector | MON       |
| Auxiliary keyboard connector | J82            | 32-bit PCI slots            | PC1 - PC3 |
| Reset switch                 | J83 pins 1 & 2 | Floppy drive interface      | PJ1       |
| Turbo LED                    | J83 pins 3 & 4 | Parallel port               | PJ2       |
| External drive LED           | J84            | Serial port 1               | PJ3       |
| Front panel connector        | J85            | Serial port 2               | PJ4       |
| PS/2 mouse interface         | J108           | IDE interface               | PJ5       |
| Turbo switch (not used)      | JP12           | Cache slot                  | SL1       |

Continued on next page. . .

# CSS LABORATORIES, INC.

## PREFERRED 590 PCI ESP SYSTEMS, MB-5861

... continued from previous page

| USER CONFIGURABLE SETTINGS          |        |                          |
|-------------------------------------|--------|--------------------------|
| Function                            | Jumper | Position                 |
| í CMOS memory normal operation      | JP7    | Open                     |
| CMOS memory clear                   | JP7    | Closed                   |
| í Cache type select write back      | JP11   | Open                     |
| Cache type select write through     | JP11   | Closed                   |
| í Pipeline enabled                  | JP13   | Closed                   |
| Pipeline disabled                   | JP13   | Open                     |
| í Cache parity disabled             | JP14   | pins 1 & 2, 3 & 4 closed |
| Cache parity enabled                | JP14   | pins 1 & 3, 2 & 4 closed |
| í Factory configured - do not alter | JP17   | N/A                      |
| í Factory configured - do not alter | JP18   | N/A                      |
| í Factory configured - do not alter | JP19   | N/A                      |
| í Factory configured - do not alter | JP23   | N/A                      |
| í On board mouse disabled           | JIR12  | Open                     |
| On board mouse enabled              | JIR12  | Closed                   |
| í Factory configured - do not alter | PJ8    | N/A                      |

Note: The location of PJ8 is unidentified.

| DRAM CONFIGURATION |               |               |               |
|--------------------|---------------|---------------|---------------|
| Size               | Bank 0        | Bank 1        | Bank 2        |
| 2MB                | (2) 256K x 36 | NONE          | NONE          |
| 4MB                | (2) 256K x 36 | (2) 256K x 36 | NONE          |
| 4MB                | (2) 512K x 36 | NONE          | NONE          |
| 6MB                | (2) 256K x 36 | (2) 512K x 36 | NONE          |
| 8MB                | (2) 512K x 36 | (2) 512K x 36 | NONE          |
| 10MB               | (2) 1M x 36   | (2) 256K x 36 | NONE          |
| 12MB               | (2) 512K x 36 | (2) 1M x 36   | NONE          |
| 14MB               | (2) 256K x 36 | (2) 512K x 36 | (2) 1M x 36   |
| 16MB               | (2) 1M x 36   | (2) 1M x 36   | NONE          |
| 16MB               | (2) 2M x 36   | NONE          | NONE          |
| 18MB               | (2) 2M x 36   | (2) 256K x 36 | NONE          |
| 18MB               | (2) 1M x 36   | (2) 1M x 36   | (2) 256K x 36 |
| 20MB               | (2) 1M x 36   | (2) 1M x 36   | (2) 512K x 36 |
| 20MB               | (2) 2M x 36   | (2) 512K x 36 | NONE          |
| 22MB               | (2) 2M x 36   | (2) 512K x 36 | (2) 256K x 36 |
| 24MB               | (2) 2M x 36   | (2) 1M x 36   | NONE          |
| 24MB               | (2) 1M x 36   | (2) 1M x 36   | (2) 1M x 36   |
| 26MB               | (2) 2M x 36   | (2) 1M x 36   | (2) 256K x 36 |
| 28MB               | (2) 2M x 36   | (2) 1M x 36   | (2) 512K x 36 |
| 32MB               | (2) 4M x 36   | NONE          | NONE          |
| 32MB               | (2) 2M x 36   | (2) 2M x 36   | NONE          |
| 34MB               | (2) 4M x 36   | (2) 256K x 36 | NONE          |
| 38MB               | (2) 4M x 36   | (2) 256K x 36 | (2) 512K x 36 |
| 40MB               | (2) 4M x 36   | (2) 1M x 36   | NONE          |

Continued on next page...

CSS LABORATORIES, INC.

PREFERRED 590 PCI ESP SYSTEMS, MB-5861

... continued from previous page

| DRAM CONFIGURATION (CON'T) |              |               |               |
|----------------------------|--------------|---------------|---------------|
| Size                       | Bank 0       | Bank 1        | Bank 2        |
| 40MB                       | (2) 4M x 36  | (2) 512K x 36 | (2) 512K x 36 |
| 42MB                       | (2) 4M x 36  | (2) 1M x 36   | (2) 256K x 36 |
| 44MB                       | (2) 4M x 36  | (2) 1M x 36   | (2) 512K x 36 |
| 48MB                       | (2) 4M x 36  | (2) 2M x 36   | NONE          |
| 48MB                       | (2) 4M x 36  | (2) 1M x 36   | (2) 1M x 36   |
| 50MB                       | (2) 4M x 36  | (2) 2M x 36   | (2) 256K x 36 |
| 52MB                       | (2) 4M x 36  | (2) 2M x 36   | (2) 512K x 36 |
| 56MB                       | (2) 4M x 36  | (2) 2M x 36   | (2) 1M x 36   |
| 64MB                       | (2) 8M x 36  | NONE          | NONE          |
| 64MB                       | (2) 4M x 36  | (2) 4M x 36   | NONE          |
| 66MB                       | (2) 8M x 36  | (2) 256K x 36 | NONE          |
| 66MB                       | (2) 4M x 36  | (2) 4M x 36   | (2) 256K x 36 |
| 68MB                       | (2) 8M x 36  | (2) 512K x 36 | NONE          |
| 68MB                       | (2) 4M x 36  | (2) 4M x 36   | (2) 512K x 36 |
| 70MB                       | (2) 8M x 36  | (2) 256K x 36 | (2) 512K x 36 |
| 72MB                       | (2) 8M x 36  | (2) 512K x 36 | (2) 512K x 36 |
| 74MB                       | (2) 8M x 36  | (2) 1M x 36   | (2) 256K x 36 |
| 76MB                       | (2) 8M x 36  | (2) 512K x 36 | (2) 1M x 36   |
| 80MB                       | (2) 8M x 36  | (2) 2M x 36   | NONE          |
| 80MB                       | (2) 8M x 36  | (2) 1M x 36   | (2) 1M x 36   |
| 82MB                       | (2) 8M x 36  | (2) 2M x 36   | (2) 256K x 36 |
| 84MB                       | (2) 8M x 36  | (2) 2M x 36   | (2) 512K x 36 |
| 88MB                       | (2) 8M x 36  | (2) 2M x 36   | (2) 1M x 36   |
| 96MB                       | (2) 8M x 36  | (2) 4M x 36   | NONE          |
| 96MB                       | (2) 4M x 36  | (2) 4M x 36   | (2) 4M x 36   |
| 96MB                       | (2) 8M x 36  | (2) 2M x 36   | (2) 2M x 36   |
| 98MB                       | (2) 8M x 36  | (2) 4M x 36   | (2) 256K x 36 |
| 100MB                      | (2) 8M x 36  | (2) 4M x 36   | (2) 512K x 36 |
| 104MB                      | (2) 8M x 36  | (2) 4M x 36   | (2) 1M x 36   |
| 112MB                      | (2) 8M x 36  | (2) 4M x 36   | (2) 2M x 36   |
| 128MB                      | (2) 8M x 36  | (2) 4M x 36   | (2) 4M x 36   |
| 128MB                      | (2) 16M x 36 | NONE          | NONE          |
| 128MB                      | (2) 8M x 36  | (2) 8M x 36   | NONE          |
| 130MB                      | (2) 8M x 36  | (2) 8M x 36   | (2) 256K x 36 |
| 130MB                      | (2) 16M x 36 | (2) 256K x 36 | NONE          |
| 132MB                      | (2) 8M x 36  | (2) 8M x 36   | (2) 512K x 36 |
| 136MB                      | (2) 8M x 36  | (2) 8M x 36   | (2) 1M x 36   |
| 136MB                      | (2) 16M x 36 | (2) 1M x 36   | NONE          |
| 138MB                      | (2) 16M x 36 | (2) 1M x 36   | (2) 256K x 36 |
| 140MB                      | (2) 16M x 36 | (2) 1M x 36   | (2) 512K x 36 |
| 144MB                      | (2) 16M x 36 | (2) 2M x 36   | NONE          |
| 144MB                      | (2) 16M x 36 | (2) 1M x 36   | (2) 1M x 36   |
| 146MB                      | (2) 16M x 36 | (2) 2M x 36   | (2) 256K x 36 |

Continued on next page. . .

CSS LABORATORIES, INC.

PREFERRED 590 PCI ESP SYSTEMS, MB-5861

... continued from previous page

| DRAM CONFIGURATION (CON'T) |              |              |               |
|----------------------------|--------------|--------------|---------------|
| Size                       | Bank 0       | Bank 1       | Bank 2        |
| 148MB                      | (2) 16M x 36 | (2) 2M x 36  | (2) 512K x 36 |
| 152MB                      | (2) 16M x 36 | (2) 2M x 36  | (2) 1M x 36   |
| 160MB                      | (2) 16M x 36 | (2) 4M x 36  | NONE          |
| 160MB                      | (2) 16M x 36 | (2) 2M x 36  | (2) 2M x 36   |
| 162MB                      | (2) 16M x 36 | (2) 4M x 36  | (2) 256K x 36 |
| 164MB                      | (2) 16M x 36 | (2) 4M x 36  | (2) 512K x 36 |
| 168MB                      | (2) 16M x 36 | (2) 4M x 36  | (2) 1M x 36   |
| 176MB                      | (2) 16M x 36 | (2) 4M x 36  | (2) 2M x 36   |
| 192MB                      | (2) 16M x 36 | (2) 8M x 36  | NONE          |
| 192MB                      | (2) 16M x 36 | (2) 4M x 36  | (2) 4M x 36   |
| 194MB                      | (2) 16M x 36 | (2) 8M x 36  | (2) 256K x 36 |
| 196MB                      | (2) 16M x 36 | (2) 8M x 36  | (2) 512K x 36 |
| 200MB                      | (2) 16M x 36 | (2) 8M x 36  | (2) 1M x 36   |
| 208MB                      | (2) 16M x 36 | (2) 8M x 36  | (2) 2M x 36   |
| 224MB                      | (2) 16M x 36 | (2) 8M x 36  | (2) 4M x 36   |
| 256MB                      | (2) 16M x 36 | (2) 16M x 36 | NONE          |
| 256MB                      | (2) 16M x 36 | (2) 8M x 36  | (2) 8M x 36   |
| 258MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 256K x 36 |
| 260MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 512K x 36 |
| 264MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 1M x 36   |
| 272MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 2M x 36   |
| 288MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 4M x 36   |
| 320MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 8M x 36   |
| 384MB                      | (2) 16M x 36 | (2) 16M x 36 | (2) 16M x 36  |

| CACHE CONFIGURATION |           |
|---------------------|-----------|
| Size                | SL1       |
| 256KB               | Installed |
| 512KB               | Installed |

| CACHE JUMPER CONFIGURATION |                   |                   |
|----------------------------|-------------------|-------------------|
| Size                       | JP5               | JP6               |
| None                       | pins 1 & 2 closed | pins 1 & 2 closed |
| 256KB                      | pins 1 & 2 closed | pins 2 & 3 closed |
| 512KB                      | pins 2 & 3 closed | pins 2 & 3 closed |

| CACHE TYPE CONFIGURATION |                   |                   |                   |
|--------------------------|-------------------|-------------------|-------------------|
| Type                     | JP4               | JP15              | JP16              |
| í Standard cache         | pins 1 & 2 closed | pins 2 & 3 closed | pins 1 & 2 closed |
| Burst cache              | pins 2 & 3 closed | pins 1 & 2 closed | pins 2 & 3 closed |

Continued on next page. . .

CSS LABORATORIES, INC.

PREFERRED 590 PCI ESP SYSTEMS, MB-5861

... continued from previous page

| CPU SPEED CONFIGURATION |                   |                   |        |
|-------------------------|-------------------|-------------------|--------|
| Speed                   | JP1               | JP2               | JP10   |
| 75MHz                   | pins 1 & 2 closed | pins 1 & 2 closed | Open   |
| 90MHz                   | pins 2 & 3 closed | pins 2 & 3 closed | Open   |
| 100MHz                  | pins 1 & 2 closed | pins 2 & 3 closed | Open   |
| 120MHz                  | pins 2 & 3 closed | pins 2 & 3 closed | Closed |
| 133MHz                  | pins 1 & 2 closed | pins 2 & 3 closed | Closed |

| PARALLEL PORT CONFIGURATION |          |                   |                   |                   |
|-----------------------------|----------|-------------------|-------------------|-------------------|
| Address                     | IRQ      | P0                | P1                | PRT               |
| Disabled                    | Disabled | pins 1 & 2 closed | pins 1 & 2 closed | N/A               |
| 3BCh                        | IRQ7     | pins 2 & 3 closed | pins 1 & 2 closed | pins 2 & 3 closed |
| í 378h                      | IRQ7     | pins 1 & 2 closed | pins 2 & 3 closed | pins 2 & 3 closed |
| 278h                        | IRQ5     | pins 2 & 3 closed | pins 2 & 3 closed | pins 1 & 2 closed |

| SERIAL PORT 1 CONFIGURATION |          |                   |                   |                   |
|-----------------------------|----------|-------------------|-------------------|-------------------|
| Address                     | IRQ      | PJ6               | S0                | S1                |
| Disabled                    | Disabled | N/A               | pins 1 & 2 closed | pins 1 & 2 closed |
| 338hh                       | Disabled | N/A               | pins 2 & 3 closed | pins 1 & 2 closed |
| 2F8h                        | IRQ3     | pins 1 & 3 closed | pins 1 & 2 closed | pins 2 & 3 closed |
| í 3F8h                      | IRQ4     | pins 1 & 2 closed | pins 2 & 3 closed | pins 2 & 3 closed |

| SERIAL PORT 2 CONFIGURATION |          |                   |                   |                   |
|-----------------------------|----------|-------------------|-------------------|-------------------|
| Address                     | IRQ      | PJ8               | S2                | S3                |
| Disabled                    | Disabled | N/A               | pins 1 & 2 closed | pins 1 & 2 closed |
| 238hh                       | Disabled | N/A               | pins 2 & 3 closed | pins 1 & 2 closed |
| 3F8h                        | IRQ4     | pins 2 & 4 closed | pins 1 & 2 closed | pins 2 & 3 closed |
| í 2F8h                      | IRQ3     | pins 3 & 4 closed | pins 2 & 3 closed | pins 2 & 3 closed |

| ON BOARD IDE CONFIGURATION |                   |        |        |
|----------------------------|-------------------|--------|--------|
| Setting                    | IDE               | PJ10   | PJ24   |
| Disabled                   | pins 1 & 2 closed | Open   | Open   |
| Enabled                    | pins 2 & 3 closed | Closed | Closed |

| ON BOARD FLOPPY CONFIGURATION |                   |        |        |
|-------------------------------|-------------------|--------|--------|
| Setting                       | FDD               | PJ11   | PJ12   |
| Disabled                      | pins 1 & 2 closed | Open   | Open   |
| Enabled                       | pins 2 & 3 closed | Closed | Closed |

Continued on next page...

CSS LABORATORIES, INC.

PREFERRED 590 PCI ESP SYSTEMS, MB-5861

... continued from previous page

| FLASH BIOS CONFIGURATION |                   |                   |                   |
|--------------------------|-------------------|-------------------|-------------------|
| Setting                  | JP20              | JP21              | JP22              |
| EPROM                    | pins 1 & 2 closed | Open              | pins 2 & 3 closed |
| í Normal mode            | pins 2 & 3 closed | pins 1 & 2 closed | pins 1 & 2 closed |
| Program mode             | pins 2 & 3 closed | pins 2 & 3 closed | pins 1 & 2 closed |
| Recovery mode            | pins 1 & 2 closed | pins 1 & 2 closed | pins 1 & 2 closed |

| ON BOARD I/O CHIP CONFIGURATION |        |        |                   |        |
|---------------------------------|--------|--------|-------------------|--------|
| Chip type                       | PJ20   | PJ21   | PJ22              | PJ23   |
| FDC37C652                       | Closed | Closed | Open              | Open   |
| FDC37C663/664 (DRATE mode)      | Open   | Open   | pins 1 & 2 closed | Open   |
| FDC37C663/664 (Media ID mode)   | Open   | Open   | pins 2 & 3 closed | Closed |