AST RESEARCH, INC.

PREMIUM GS 6233 (503453-101)

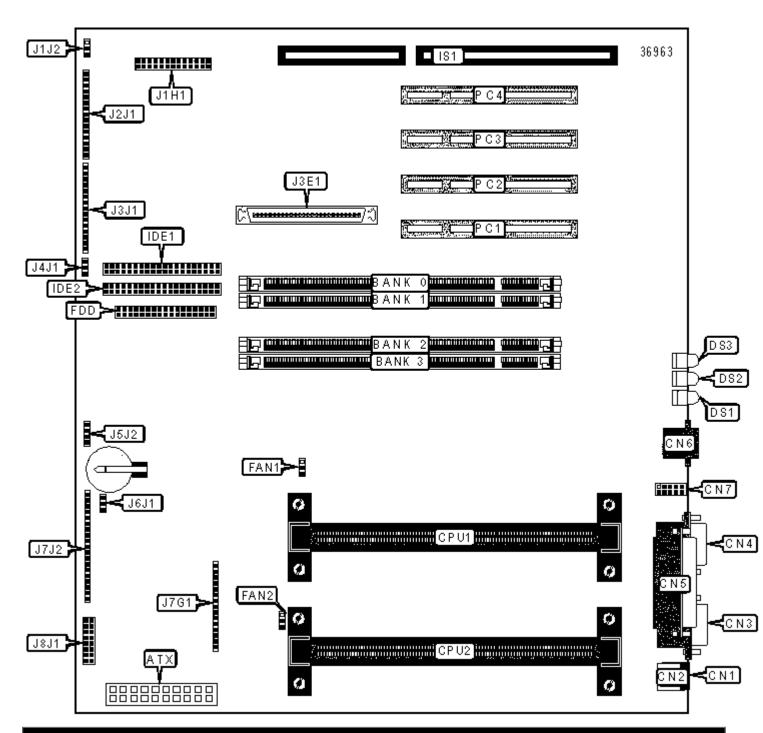|	
Device Type	Mainboard
Processor	Pentium II
Processor Speed	233/266/300/333/366MHz
Chip Set	Intel 440LX
Video Chip Set	Cirrus Logic
Maximum Onboard Memory	256/512MB (SDRAM supported)
Maximum Video Memory	1MB
Cache	512KB (located on the Pentium II CPU)
BIOS	Unidentified
Dimensions	330mm x 305mm
I/O Options	16-bit ISA slot, 32-bit PCI slots (4), Ethernet 10BaseT connector, floppy drive interface, IDE interfaces (2), Wide SCSI interface, parallel port, PS/2 mouse port, PS/2 keyboard port, serial port, serial interface, VGA port, ATX power connector

Diagram labels: J1J2, J1H1, J2J1, IS1, 36963, PC4, PC3, J3E1, PC2, J3J1, IDE1, PC1, J4J1, IDE2, BANK 0, BANK 1, FDD, BANK 2, BANK 3, DS3, DS2, DS1, J5J2, CN6, FAN1, CN7, J6J1, CPU1, CN4, J7J2, CN5, J7G1, FAN2, CN3, J8J1, CPU2, ATX, CN2, CN1

CONNECTIONS			
Purpose	**Location**	**Purpose**	**Location**
ATX power connector	ATX	IDE interface 2	IDE2
PS/2 mouse port	CN1	16-bit ISA slot	IS1
PS/2 keyboard port	CN2	SMM connector	J1H1
Serial port	CN3	System fan power 1	J1J2
VGA port	CN4	Wide SCSI interface	J3E1
Parallel port	CN5	System fan power 2	J4J1

Ethernet 10BaseT connector	CN6	IDE interface LED	J5J2
Serial interface	CN7	Local I2C connector	J6J1
Heat sink fan 1	FAN1	AT front panel connector	J7J2
Heat sink fan 2	FAN2	Front panel connector	J8J1
Floppy drive interface	FDD	32-bit PCI slots	PC1 - PC4
IDE interface 1	IDE1		

USER CONFIGURABLE SETTINGS		
Function	**Label**	**Position**
» CMOS memory normal operation	J2J1	Pins 1 & 2 closed
CMOS memory clear	J2J1	Pins 2 & 3 closed
Password enabled	J2J1	Pins 5 & 6 closed
Password disabled	J2J1	Pins 6 & 7 closed
Normal boot enabled	J2J1	Pins 9 & 10 closed
Recovery boot enabled, BIOS loaded from disk	J2J1	Pins 10 & 11 closed
BIOS write protection enabled	J2J1	Pins 13 & 14 closed
BIOS write protection disabled	J2J1	Pins 14 & 15 closed
CPU speed configuration disabled	J3J1	Pins 1 & 2 closed
CPU speed configuration enabled	J3J1	Pins 2 & 3 closed
FRB timer enabled	J3J1	Pins 5 & 6 closed
FRB timer disabled	J3J1	Pins 6 & 7 closed
Chassis intrusion detect enabled	J3J1	Pins 9 & 10 closed
Chassis intrusion detect disabled	J3J1	Pins 10 & 11 closed
Minimum in-order queue host bus	J3J1	Pins 13 & 14 closed
Maximum in-order queue host bus	J3J1	Pins 14 & 15 closed

DIMM CONFIGURATION

Size	Bank 0	Bank 1	Bank 2	Bank 3
8MB	(1) 1M x 64	None	None	None
16MB	(1) 1M x 64	(1) 1M x 64	None	None
16MB	(1) 2M x 64	None	None	None
24MB	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64	None
32MB	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64	(1) 1M x 64
32MB	(1) 2M x 64	(1) 2M x 64	None	None
32MB	(1) 4M x 64	None	None	None
48MB	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64	None
64MB	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64	(1) 2M x 64
64MB	(1) 4M x 64	(1) 4M x 64	None	None
64MB	(1) 8M x 64	None	None	None
80MB	(1) 4M x 64	(1) 4M x 64	(1) 1M x 64	(1) 1M x 64
96MB	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64	None
96MB	(1) 4M x 64	(1) 4M x 64	(1) 2M x 64	(1) 2M x 64
128MB	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64	(1) 4M x 64
128MB	(1) 8M x 64	(1) 8M x 64	None	None
128MB	(1) 16M x 64	None	None	None
144MB	(1) 8M x 64	(1) 8M x 64	(1) 1M x 64	(1) 1M x 64
160MB	(1) 8M x 64	(1) 8M x 64	(1) 2M x 64	(1) 2M x 64
192MB	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64	None
192MB	(1) 8M x 64	(1) 8M x 64	(1) 4M x 64	(1) 4M x 64
256MB	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64	(1) 8M x 64
256MB	(1) 16M x 64	(1) 16M x 64	None	None
256MB	(1) 32M x 64	None	None	None
272MB	(1) 16M x 64	(1) 16M x 64	(1) 1M x 64	(1) 1M x 64
288MB	(1) 16M x 64	(1) 16M x 64	(1) 2M x 64	(1) 2M x 64

320MB	(1) 16M x 64	(1) 16M x 64	(1) 4M x 64	(1) 4M x 64
384MB	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64	None
384MB	(1) 16M x 64	(1) 16M x 64	(1) 8M x 64	(1) 8M x 64
512MB	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64	(1) 16M x 64

Note: Board supports SDRAM memory.

CACHE CONFIGURATION

Note: 256KB/512KB cache is located on the Pentium II CPUs.

CPU SPEED SELECTION

Speed	J7G1/Pins 1 & 2	J7G1/Pins 2 & 3	J7G1/Pins 5 & 6	J7G1/Pins 6 & 7
233MHz	Open	Closed	Closed	Open
266MHz	Closed	Open	Open	Closed
300MHz	Closed	Open	Open	Closed
333MHz	Open	Open	Open	Closed
366MHz	Open	Open	Open	Closed

CPU SPEED SELECTION

Speed	J7G1/Pins 9 & 10	J7G1/Pins 10 & 11	J7G1/Pins 13 & 14	J7G1/Pins 14 & 15
233MHz	Open	Closed	Closed	Open
266MHz	Closed	Open	Closed	Open
300MHz	Open	Closed	Closed	Open
333MHz	Closed	Open	Closed	Open
366MHz	Open	Closed	Closed	Open

DIAGNOSTIC LED(S)

LED	Status	Condition
DS1	On	Network controller at 100Mbps transfer speed operation
DS1	Off	Network controller at 10Mbps transfer speed operation

DS2	On	Link to LAN; network controller & hub receiving power; or cable connection good
DS2	Off	No Link to LAN; network controller & hub not receiving power; or cable connection bad
DS3	On (Blinking)	Network controller sending or receiving data
DS3	Off	Network controller not sending or receiving data