

Number of Beeps	Description	Solution
1	Memory refresh timer error.	Reseat or replace memory
2	Parity error in base memory (first 64KB block)	Reseat or replace memory
3	Base memory read/write test error	Reseat or replace memory
4	Motherboard timer not operational	Repair or replace motherboard
5	Processor error	Repair or replace motherboard
6	8042 Gate A20 test error (cannot switch to protected mode)	Reconnect or replace keyboard
7	General exception error (processor exception interrupt error)	Repair or replace motherboard
8	Display memory error (system video adapter)	Repair or replace video card
9	AMIBIOS ROM checksum error	Repair or replace BIOS
10	CMOS shutdown register read/write error	Repair or replace motherboard
11	Cache memory test failed	Repair or replace motherboard

## AMI BIOS

## Phoenix BIOS

Number of Beeps	Description	Solution
1-2-2-3	BIOS ROM checksum	Repair or replace BIOS
1-3-1-1	Test DRAM refresh	Reseat or replace memory
1-3-1-3	Test 8742 Keyboard Controller	Reconnect or replace keyboard
1-3-4-1	RAM failure on address line xxxx	Reseat or replace memory
1-3-4-3	RAM failure on data bits xxxx of low byte of memory bus	Reseat or replace memory
1-4-1-1	RAM failure on data bits xxxx of high byte of memory bus	Reseat or replace memory
2-1-2-3	Check ROM copyright notice	Repair or replace motherboard
2-2-3-1	Test for unexpected interrupts	Repair or replace motherboard

\* Treat the dashes as pauses

## Award BIOS

Number of Beeps	Description	Solution
1 Long, 2 Short	A video error has occurred	Repair or replace video card
Any Other Beeps	Memory Error	Reseat or replace memory