

QUESTIONS

Question 1

When I received my copy of Confidence /// from Apple, it came without any documentation. Maybe they slipped up or maybe there is no documentation for Confidence ///. What I want to know is what do the squares mean (I suspect RAM), what indicates a failure, where to look on the memory board if a failure shows up, etc?

- Jeff Fritz

Answer 1

Well Jeff, I didn't know so I turned your question (or at least part of it) over to Paul Barale. Below is an answer.

APPLE /// MEMORY DIAGNOSTIC DISPLAY

The Apple /// performs a memory check whenever it's turned on. (Also during Confidence ///) Normally the display does stay on the screen long enough to be noticed as more than a fleeting pattern in the upper left hand corner of the monitor. However, if a memory error occurs, you will get an array of periods with an inverse video "1" to indicate the faulty bit. The memory diagnostic can also be invoked by <control><open apple> >F6E6G [WARNING --- I have heard that invoking the memory diagnostic with a profile card in the machine can do bad things - best to unload your machine first, before experimenting.

Row	Bits							
7	b7	b6	b5	b4	b3	b2	b1	b0
6	b7	b6	b5	b4	b3	b2	b1	b0
5	b7	b6	b5	b4	b3	b2	b1	b0
4	b7	b6	b5	b4	b3	b2	b1	b0
3	b7	b6	b5	b4	b3	b2	b1	b0
2	b7	b6	b5	b4	b3	b2	b1	b0
1	b7	b6	b5	b4	b3	b2	b1	b0
0	b7	b6	b5	b4	b3	b2	b1	b0

This information can be decoded with the following table to indicate which chip needs replacement.

MAP OF MEMORY BOARD

Board									
Ref	Row	Chips							
D	1	b7	b6	b5	b4	b3	b2	b1	b0
		2	b7	b6	b5	b4	b3	b2	b1
C	3	b7	b6	b5	b4	b3	b2	b1	b0
		0	b7	b6	b5	b4	b3	b2	b1
B	4	b7	b6	b5	b4	b3	b2	b1	b0
		5	b7	b6	b5	b4	b3	b2	b1
B	6	b7	b6	b5	b4	b3	b2	b1	b0
		7	b7	b6	b5	b4	b3	b2	b1

For example, if your display looked like this:

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. . . . .
. . . 1 . . .
. . . . .
. . . . .
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you would need to replace the fourth chip from the left end of row "B". This row appears double width because it has 32K RAM chips.