

Re: ALPHA 255, in the intensive care unit

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Miguel Angel Usón Finkenzeller wrote:

>

> *The famous 2.2 microFarad capacitor next to the mouse and keyboard outlets*
> *seems allright,*

Tested or just visual inspection?

> *the power supply puts out the expected +-12, +5 and 3.3*
> *volts, all the connectors a were and are again firmly attached, and yet...*

I've recently had a series of failures on Athlon systems that were very similar to this. Each power supply seemed ok, but when it was swapped out with a new unit, the systems stopped crashing. Apparently some power supplies can fail by passing too much noise or just glitching from time to time, but these always test at the correct voltage with a voltmeter (or the system's own sensors, if these are present.) Admittedly this is a bit unusual, more typically power supplies just die (sometimes spectacularly). In any case, the power supply is far and away the most likely component to fail in a way that would produce these sorts of symptoms. (The disk is probably more likely to fail but VMS is usually pretty clear about that and it shows up in the error logs – power supply failures just crash the system instantly.)

>

> *One thing I find strange is that the CPU cooling fan receives only 7.0*
> *volts. Is that what it should be? As said, the 12v reach the motherboard.*

Your voltmeter may be confused trying to measure the DC voltage across the running fan motor. Does the fan appear to be spinning at a normal speed? If you're concerned try replacing the fan (fans are cheap). Also, you should check that the heat sink on the CPU isn't packed up with dust. I'm not familiar with the heat sink in a 255 but sometimes one must remove the fan on top to get a good look at the heat sink.

>

> *Any hints are appreciated.*

comp.os.vms: Re: ALPHA 255, in the intensive care unit

It doesn't sound too much like a heat problem if the system crashes quickly from a cold start. But you didn't say that exactly, only that it it crashes on restart, and the system may have been (too) hot at the time. Take off the top of the case, aim a big floor fan into it, turn the system off and let it cool down for 15 minutes. Then start it up with the case still open and the external fan running and see if runs without crashing. Caveat: what's the ambient room temperature? Caveat 2: don't plug the floor fan into the same circuit as the computer!

Another possibility – noise or spikes through the power lines. You're at a university and who knows what hideous equipment is plugged in nearby. Who knows when said equipment may be running or not. Try plugging the Alpha into an uninterruptible power supply or some other device that will feed it clean power. If that isn't available try it elsewhere on campus or at home where the power is less likely to be contaminated by heavy electrical equipment.

Regards,

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