Re: IBM Thinkpad A2x series laptop "common" failure−−what's the secret?

Source: http://sci.tech−archive.net/Archive/sci.electronics.repair/2007−01/msg01183.html

- *From*: Rick <rickajho@xxxxxxx>
- *Date*: Fri, 19 Jan 2007 19:36:59 −0400

webpa wrote:

> prc1 wrote:
>
> > I have an IBM Thinkpad A20m laptop (2628−4UU) that failed last evening with the same symptoms that literally hundreds of others have reported over the last few years. Mine had been running fine, but I went to power it up and, once it got to the Windows desktop it froze. Powered off, then tried powering on again. Unit comes on when power is pressed (HD spins up, all lights flash on then go off except for power, I can hear the CPU fan running). No POST, no boot, black screen.
> >
> > I replaced the CMOS battery, reseated everything, yada yada yada. The thinkpads.com web forums list a possible cause as a failure of one (or both) chips in the dc−dc power section on the mainboard. These are the Analog Devices ADP3421JRU and ADP3410KRU ICs. This is supposedly
> > due to a design flaw. Some people also say to change three MOSFETs (IRF−7811) as well. Some report success, others don't.
> >
> > It seems to me that by simply replacing the chips you're not fixing the problem. SOMETHING caused the chips to fail as there wasn't (to my knowledge, anyway) a bad run of those chips. Bad capacitors in the circuit, maybe? Bad resistors, diodes ...? People ARE apparently fixing the boards, as dealers will sell you refurbished ones or will fix your broken unit.
> >
> > So, what's the secret? Which components are routinely replaced during the course of one of these repair jobs?
> > ** To respond, remove the crap from my addy... **
>
> Never heard of this myself (have 2 thinkpads...older than yours, though). Symptoms sound like memory failure. How much installed? If one stick, remove it and see if you get a POST screen...If 2 sticks, try removing one and then the other. Sony had a problem with cold solder

joints in the RAM sockets. Maybe they weren't the only ones.

Being another victim of this problem − an A21m to be exact − I can definitely say it's not a memory issue. It's a mainboard component failure. The speculation seems to surround component failure in the power management circuits on the main board. It's also reported a lot on the T20 series as well. When it happens the system won't even get to a POST − how could it be a memory failure? Hit the power switch − all five status LEDs light, then they all go out except for the power on status LED. Any maybe you hear the CD ROM drive spin up for two seconds. That's it... You don't even get a screen display, or anything else. Keep trying that and if you are lucky you will get to a POST. And then if you are really lucky you might get into the BIOS long enough to disable all power management options − before if locks up hard. That will help alleviate the symptoms somewhat. You might get the thing to power on more consistently. But not enough to prevent the system from locking up hard within 5 minutes.

It went to an authorized IBM repair center. They tested the RAM and everything else. All they had to say was "main board failure." And IBM wanted $999.00 to replace the main board on a computer I paid $799.00 for.

I thought ThinkPads were rock solid. But after this experience... If you google "dead IBM thinkpad", well, see what pops up.

Now I have to figure out exactly what main board I need for this thing. The part number listed at IBM's web site doesn't match the unit I have regarding the on board video system...

Rick
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