

## Re: USB port blew -- why?

**Source:** <http://sci.tech-archive.net/Archive/sci.electronics.repair/2004-10/0587.html>

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what main board? FIC ECS MSI?...usb blew cause the board blows.

"larrymoencurlly" <larrymoencurlly@my-deja.com> wrote in message  
news:755e968a.0410031718.36d14f87@posting.google.com...

> *One of the ports of my NEC-based USB 2.0 card quit working because  
the*

> *National Semiconductor LM3526 power controller chip failed. I'm*

> *pretty sure that I didn't zap it with static (I always touch the*

> *outer metal shell to the computer case before plugging it in) or*

*try*

> *to plug it in backwards. The data sheet for the LM3526 says that*

*it's*

> *protected against voltage, current, and even temperature, so what*

> *happened?*

>

> *National Semiconductor says that each USB port must have a 120uF or*

> *larger tantalum capacitor between +5V and ground for protection*

> *against transients that occur during hot-plugging, and NEC's example*

> *schematic for their uPD720100A USB 2.0 chip shows the LM3526 using*

> *150uF aluminum in parallel with 0.1uF ceramic. But my USB card has*

> *only a 100uF aluminum capacitor and maybe a ceramic capacitor in*

> *parallel for this. Could this be why the USB port got zapped?*

*Would*

> *it help to solder a tantalum in parallel as well? Will it hurt to*

*add*

> *it?*