Re: Looking for PCB layout designer

Source: http://sci.tech−archive.net/Archive/sci.electronics.design/2005−03/5644.html

---

From: keith (*krw_at_att.bizzzz*)
Date: 03/28/05

Date: Sun, 27 Mar 2005 22:24:32 −0500

On Sun, 27 Mar 2005 13:18:14 −0700, Fritz Schlunder wrote:

>
> "keith" <krw@att.bizzzz> wrote in message
> news:pan.2005.03.27.17.32.57.791930@att.bizzzz...
>> On Sun, 27 Mar 2005 06:37:54 −0700, Fritz Schlunder wrote:
>
>> It's rather hard to compare single−layer boards with ten−layer complexity.
>> Sure, if you have the same functino to perform a single layer will be a
>> tad tougher. One doesn't add layers if they're not needed. I was
>> objecting to your stating that 10+ layer boards and BGAs weren't all that
>> common ten years ago. They were.
>
>
> Well that is the problem with words like "common" whose definition wasn't
> quantified in this context. So we can both be right on this. My version of
> the definition of "common" is evidently different from yours.

Common <> consumer products. Even there, the Japaneese were using BGAs extensively *ten* years ago. Hell man, it's 2005! BGAs weren't uncommon in '90. Sure, people were scared of 'em, but change is good for the soul.

> That said, in 1995 I was using a 486 DX33 and it didn't have any BGA
> parts on it. In 1999 I worked for an electronics manufacturing company
> with X−ray equipment needed for working with BGAs. While that was in no
> way amazing in 1999, not all of the local competitors in the business
> had the tools needed for working with BGA parts.

Consumer PC crap. Cost is king in this market, not reliability, performance, size, or any other metric. Cost is only second to *COST*. Sure multi−layer boards are more expensice (the board manufacturers yelped at a $5 adder to go to six layer), but that does *not* mean that they weren't common. Mainframes have been using boards with more layers than I've got fingers and toes (full compliment, BTW) for 25 years, or more.

>> > In many ways I consider computer motherboards to represent the most
>> > complicated