



OPINION: ESD Safe Barcode Labels.... Who Needs Them (Really??)

This opinion may seem strange to many of you who know Polyonics, and know that we pioneered static dissipative barcode label materials....BUT.....we've heard for several years now about the importance of ESD-safe polyimide labels and other materials for the PCB/PWB industry. Yet the results to date, in terms of actual use in the field, have been very disappointing. Highest praise go to to my engineering and physicist colleagues in terms of exponential increases in both chip and board yields, as well as "six sigma" strides in quality. Their continuous vigilance against ESD damage to circuitry and components has truly expanded the market for microprocessor based equipment. So, it was logical to

develop ESD safe labels, especially when asked to by more than one large contract manufacturing company.

I remember seeing a "reverse auction" on the web a couple of years ago. Initially, the RFQ required the several million labels to be static dissipative. The number of bidders was small, since there were only 2 companies who manufactured esd safe polyimide label materials (one of which is Polyonics, of course !!). When that technical requirement was removed, in favor of "normal" polyimide labels, the number of bidders on the bid list quadrupled. Sounded like plain ol' economics to me...the more bidders, the lower the price..."..the heck with 'the ESD' in ESD labels". **So, even though we have developed the [TRIBOGARD\(R\) family of polyimide label materials \(and others\)](#)**, I have wondered whether it's just "one of those things" you have to do and make available to our customers, in order to show that technical sophistication and readiness..... **if the need arises**. Is this technical feature truly needed in the PCB industry? **Any thoughts from you all?** I welcome your comments at newsletter@polyonics.com.

I have a few thoughts which I'll share in the next issue, but I did not want to prejudice anyone else's thinking this time around. I look forward to your ideas on this one. **Jim Williams**

PS. I've been asked by many people if the adhesive for an ESD safe label needs to be electrically conductive, or dissipative. I've been told that a paper has been published and presented, that shows that the tendency for a label to be dissipative can be measured by the surface resistivity of the **ADHESIVE**.

THIS IS NOT TRUE ! Yet another myth to DEBUNK. If you want more information, please contact me directly at jim.williams@polyonics.com.