

WIRED FOR SUCCESS

BY BILL KIRCHNER, FREELANCE WRITER

Circuits, LLC specializes in flexible printed circuit boards

They say necessity is the mother of invention, but for some local manufacturers, the entrepreneurial spirit is simply embedded in their DNA. So, it's really no surprise that Circuits, LLC, would shrug off a lousy economic climate to carve out a solid niche in the flexible printed circuit boards (PCB) market, which is typically dominated by foreign manufacturers.

"I saw an opportunity in the printed circuit board industry for a company specializing exclusively in the manufacture of flexible PCB products," Adeodato "Chicco" Vigano, the President and Founder of Circuits, LLC, said.

"Even though from a processing standpoint, flex and traditional rigid PCBs use almost identical manufacturing processes, the 'rigid' PCB houses are typically not well-suited to handle the intricacies associated with flex, which ultimately results in quality problems down the road," he continued. "Flex boards are well suited for military, aerospace, medical and industrial applications that require high reliability. These customers can't tolerate quality issues, so our facility was designed with defect-free manufacturing in mind."

From its inception in 2008, Circuits, LLC, has staked a bold claim for manufacturing in Pennsylvania, taking a former metal fabrication shop and transforming it into a 50,000-square-foot, world-class fabricating and testing facility staffed with some of the area's most experienced professionals.

"The key is the combination of facilities and people," Vigano said. "From a facility standpoint, what makes Circuits unique is having a manufacturing floor designed specifically for flex boards, good logistics and product flow and with integrated environmental controls.

"The flex board raw materials are very thin and require delicate handling so that the material is not scratched or damaged when moving it from process to process; we designed our facility and some of our equipment to minimize transport and handling, which

results in a better quality finished product and higher yields," he explained. "Very few PCB companies have that floor design and it is almost impossible for established shops to reconfigure the existing space to meet those specifications."

Of course, the facilities are only half of the story, Circuits' team is staffed with industry experts who have spent their careers making boards and supporting the electronics industry.

The company has more than 170 years combined experience and its senior process engineers not only spec'd the equipment they use in their processes, but they built and assembled their equipment so they know the machinery inside and out.

"I'm very proud to have this team and every Circuits customer has access to their knowledge and expertise as a resource in designing flex applications," Vigano said.

But why here? Why western Pennsylvania?

"I think there is a lot of value in having a close-by, dependable supplier for any OEM developing new products or needing to protect the IP of existing products," Vigano said. "Shopping for a cheaper supplier across an ocean used to be almost a foregone conclusion and a necessity to stay competitive. This forced the local suppliers to become competitive to survive and now I believe that OEM companies are appreciating more and more the availability of near-by knowledgeable resources that lower the overall cost of their products. That is particularly true for a custom-built item like a printed circuit board."

"In that respect, western PA is a great environment for a start-up company as we can combine a long tradition for high-quality manufacturing with a strong group of high-tech local companies and excellent universities that are stimulating new products introduction and developments, Vigano added. "Costs are reasonable compared to many other areas of the country and that is very attractive in this economic environment."

For more information about Circuits, LLC, visit www.circuits-corp.com ■