

HONOLULU – Regionalization is an ongoing trend in electronics, and Mexico is making a surprising run at China, according to **Charlie Barnhart & Associates**.

Based on a CBA survey of North American-based midmarket OEMs, China and Mexico ranked better than the US and Canada for high-volume manufacturing and continuous flow, while China topped Mexico in those two categories. However, in every other respect, Mexico tops China.

In general, manufacturing is moving from the US to Mexico; from Western to Eastern Europe; and from China to Mexico and Southeast Asia, CBA says. Each of the growth regions has its drawbacks, however, CBA analyst Eric Miscoll said in an Aug. 24 webinar. Apprehensions in China include IP theft, increasing labor rates, freight/logistical costs, quality, material support, communications and the legal environment of the country. Mexico has issues with violence and safety, political stability, workforce and product quality, work ethic and material sourcing.

Miscoll said the longtime factor of labor costs is influencing where companies manufacture products. Specifically, in the first half of 2011 in the US, the industry average per direct labor hour was \$39.32, compared to \$34.50 in 2003. In the first half of this year in China, the amount in US dollars was \$11.83, compared to \$6.90 in 2003. However, Mexico's labor rate dropped, with the first-half 2011 figure at \$11.26, compared to \$16.73 in 2003. In the second half of 2011, Mexico's cost of labor will increase slightly (about 1.1%), according to the firm.

CBA says China prevails in commoditized products and has more mature designs compared to Mexico. China's focus is mostly on communications, computer and consumer markets. On the other hand, Mexico generally produces larger, heavier products for the automotive, appliances and aerospace sectors destined for the US.

CBA offered up a pair of case studies supporting its data. In them, **Applied Technical Services**, a contract electronics manufacturer with operations in Everett, WA, and Hermosillo, Mexico, has a turnover rate of less than 5% in Mexico, and most of its employees speak English well. ATS hasn't experienced any safety issues in the area, and labor rates are increasingly competitive with Asia and India. The firm also noted the stable currency relative to the US dollar, and low (2%) employee absenteeism.