

## In Brief

Cookson Electronics Assembly Materials ([alphametals.com](http://alphametals.com)) will implement a surcharge on its solder paste to cover cost increases for tin if the London Metal Exchange price exceeds \$9,500/metric ton. Tin prices more than doubled in the past six months vs. the previous two-year average. The company plans to rescind the surcharge when tin prices drop below the mark.

Elcoteq Network Corp. ([elcoteq.com](http://elcoteq.com)) will build an \$18.6 million plant in St. Petersburg, Russia. Construction of the 158,000 sq. ft. plant is expected to begin in the final quarter of 2004. The plant is expected to employ about 1,500 people.

Production Solutions Inc. ([production-solutions.com](http://production-solutions.com)), a provider of substrate support tooling systems, named Protec sales representative in Alabama, Georgia, Mississippi and Tennessee.

MfgQuote ([mfgquote.com](http://mfgquote.com)) is an online source for custom manufactured parts and engineered components, including PCBs.

International Manufacturing Services Inc. ([ims-resistors.com](http://ims-resistors.com)), a manufacturer of thick-film resistors and substrates, named DM Associates ([dmassociatesllc.com](http://dmassociatesllc.com)) as representative in Ohio, Indiana, Kentucky, Michigan and western Pennsylvania.

Centor Software Corp. ([centor.com](http://centor.com)), Foxconn ([foxconn.com](http://foxconn.com)), MatrixOne ([matrixone.com](http://matrixone.com)), Microsoft ([microsoft.com](http://microsoft.com)) and Speedline Technologies ([speedlinetech.com](http://speedlinetech.com)) have joined NEMI ([nemi.org](http://nemi.org)), the industry consortium.

Valor Computerized Systems ([valor.com](http://valor.com)) received special recognition from IPC ([ipc.org](http://ipc.org)) for its work on IPC-2581, a data transfer format, and its donation of ODB++ (X).

## What Execs Need to Know about Pb-Free

Atlanta – A new one-day seminar that instructs on the impact of new environmental regulations on operational costs and process implementation is now available from Design Chain Associates, EPTAC Corp. and UP Media (publisher of *Circuits Assembly*).

The seminar covers product development, lifecycles, outsourcing, procurement and logistics; design for assembly, disassembly (recycling) and reliability; components and materials availability; costs of non-conformance; and production equipment.

Workshops will take place in Boston on Sept. 16, San Jose on Sept. 30, Los Angeles on Oct. 1, Minneapolis on Oct. 21 and Dallas on Nov. 9.

The speakers are Ken Stanwick, senior vice president at DCA, and Leo Lambert, vice president at EPTAC.

The program is designed for executives and managers, and manufacturing engineers and compliance officers. Details: [pcbshows.com/leadfree](http://pcbshows.com/leadfree).

## PCB Shops Lining Up for PCB East

Manchester, NH – More than 20 board shops ranging from niche firms to global players will be among the exhibitors at next month's PCB Design Conference East 2004. Now in its ninth year, PCB East will be held Oct. 4-8 at the Radisson Hotel Manchester, in Manchester, NH.

This year's show highlights lead-free and embedded components, with more than a third of the technical conference focused on the challenges posed by lead-free board design/manufacture/assembly, embedded components and high-speed design. Registration for the two-day exhibition and most special events is free. The complete conference brochure is available at [pbeast.com](http://pbeast.com).



## Wanted: Excellent Services Providers

Atlanta – Beginning Oct. 1, *Circuits Assembly* will seek participants for the 2005 Service Excellence Awards for EMS Providers and Electronics Assembly Equipment, Material and Software Suppliers. The SEAs honor companies in the manufacturing industry for excellence in customer service. The program is also a means for participants to see how they compare to peers in customer satisfaction.

Through a third-party research firm, customers will fill out online surveys to determine a participating company's level of customer satisfaction in various categories, including: dependability/timely delivery; ease of use; manufacturing quality; responsiveness to requests and changes; technology; and value for the price. All customer responses and ratings are calculated and summarized in a confidential report available to each participant.

*Circuits Assembly* recognizes small, medium and large EMS providers and the following categories of suppliers: dispensing; pick-and-place; repair and rework; screen printing; test and inspection; materials; manufacturing software; and supply chain management software.

Winners will be honored during APEX 2005 in Anaheim, CA. Net proceeds will be donated to the SMTA Charles Hutchins Educational Grant.

For more information on the awards program, or to enter, visit [circuitsassembly.com](http://circuitsassembly.com) or email Robin Norvell at [rnorvell@upmediagroup.com](mailto:rnorvell@upmediagroup.com).



In Brief



London, UK – David Wright, an architect and founder of the design company Electrickery ([electrickery.uk.com](http://electrickery.uk.com)), has found a new use for old circuit boards. After realizing that passing light through translucent PCBs creates interesting visual effects, Wright patented the use of PCBs in lamps and lights that he creates.

Wright was amazed at the variety of color and design on circuit boards, as well as the fact that many thousands are discarded each year by the electronics industry. He says, "We are always on the lookout for PCB manufacturers that will let us have their scrap material."

What started as simple, four-sided pendant lamps soon turned into intricate, multi-dimensional installations and commissions. "What's really amazing is that these beautiful circuit boards, in their everyday use, are hidden from view," said Wright.

BP Microsystems ([bpmicro.com](http://bpmicro.com)) will standardize its automated product tools on the Windows XP platform. All automated equipment will ship with Windows XP only, unless otherwise requested. BP also named Beijing Yake Electronics Company as distributor in north and northwest China.

Indium Corp. ([indium.com](http://indium.com)) named Progressive Technologies to provide service and sales of its assembly products in central New York state.

Amkor Technology Inc. ([amkor.com](http://amkor.com)) is acquiring Unitive Inc. and 60% of its Unitive Semiconductor Taiwan Corp. JV, for \$48 million plus \$23 million in debt. Unitive is a maker of 300 mm electroplated wafer bumping technology and wafer-level packaging.

## Cookson Offering Pb-Free Process Evals

Jersey City, NJ – Cookson Electronics Assembly Materials has opened its analytics lab to assist companies in assessing lead-free process capability. Through CE Analytics, Cookson's diagnostics and analytical arm, the company provides a test kit containing laminates, pad finishes, stencils, lead-free solder paste and cored wire combined with boards, lead-free components and setup software (from Practical Components).

Users can assemble and ship boards to CE Analytics, where lead-free process capability assessment services are conducted and validated based on IPC standards. Details: [cooksonelectronics.com/no-lead](http://cooksonelectronics.com/no-lead).

## Flextronics Dials In

San Jose, CA – Flextronics ([flextronics.com](http://flextronics.com)) has signed an agreement to acquire Hughes Network Systems' stake of 55% of Hughes Software Systems ([hssworld.com](http://hssworld.com)), a software and services provider to telecom infrastructure companies.

The transaction, expected to close no later than October at a cost of \$226 million, will give the EMS company a leg up in its drive to build for the telecom market.

## New Process Has Double Vision

San Jose, CA – Sanmina-SCI ([sanmina-sci.com](http://sanmina-sci.com)) and Agilent Technologies ([agilent.com](http://agilent.com)) have devised a technique for rapid generation of high-resolution, sub-surface 3-D scans of complex multilayer backplanes and assemblies.

Using Agilent's 5DX Series 5000 automated x-ray system, the new method verifies the position of press-fit connectors with compliant pins within plated through-hole conduits. The companies said the inspection method scans the board or backplane surface and internal layers simultaneously to check solder contacts of components and press-fit connector contact integrity.

## Spotting Fakes

Princeton Junction, NJ – A special manual that identifies fraudulent and substandard parts is available from the Independent Distributors of Electronics Association ([idofea.org](http://idofea.org)). The *Electronic Components Inspection Manual* sets general requirements for receiving and inspecting components at brokers, suppliers or test labs.

IDEA also informs private and federal agencies of matters involving substandard products, ensures that users have an effective system for reporting counterfeit and fraudulently marketed products and provides technical assistance to system users for identifying such products. The manual is available to IDEA members.

## ATEXpo: Going to Mars

Rosemont, IL – The principal manager for the Mars Rover devices will keynote Assembly Technology Expo ([atexpo.com](http://atexpo.com)) later this month in suburban Chicago, IL. Christopher Salvo, mission manager, Mars Exploration Rover at NASA/Jet Propulsion Laboratories, will deliver "A Tale of Two Rovers – Integrating, Testing and Operating the Mars Exploration Rovers," one of three keynotes of the Sept. 27-30 trade show. Also on tap: Karl Eberle, vice president and general manager of Harley-Davidson's Kansas City assembly facility, and *Cheers'* John Ratzenberger, now producer and host of the John Ratzenberger's *Made in America* series.



The conference, now in its 25th year, features over 30 sessions on such topics as lean production, flexible assembly and robotics in assembly. A special pavilion will show solutions for design, packaging, fabrication, assembly and test. The pavilion will also feature a working assembly line incorporating equipment for material handling and transport, screen printing, component pick-and-place, reflow, wave solder, visual and x-ray inspection, robotic point-to-point soldering, packaging, and factory modeling and simulation.

People

Universal Instruments Corp. named **Ian deSouza** (below) president, replacing **Ian McEvoy**, who plans to return to the U.K., where his family resides. Previously senior vice president of operations and systems, deSouza was responsible for global supply chain, software development and manufacturing activities, including operations in China.



Cookson Electronics named 11 employees as 2003 Presidents Award recipients. **Doreen Agnew, Robert Wallace, Gary Klimala, Robert Cahill, Wim van Ravenswaay, Rich Caron, Rick Correia, Stephen Whitehead, John Tremblay, Mark Foster** and **Axel Fuhrmann** were recognized for achievements beyond their day-to-day responsibilities with direct impact on the business.

Indium Corp. named **Paul Salmon** director of marketing in Europe.

Enthone Inc. appointed **Aaron Storms** managing director of Latin America.

March Plasma Systems named **Terumitsu Tsuji** (top) business manager and **Yuji Takai** (bottom) regional sales manager for Japan. Tsuji has six years of sales and service management experience in semiconductors. Takai spent four years selling thin-film processing equipment for Samco International.



Feinfocus named **Dr. Guido Rademaker** and **Thomas Pukall** as application engineers, responsible for identifying market demands for x-ray equipment.

Able Electronics promoted **George Laurie** to vice president of manufacturing. Laurie joined Able in February 2000 as director of manufacturing.

Scholars Cash In

Chicago – Three high school students received \$500 scholarships from the IPC Electronics Assembly Scholarship Fund. Mateusz Czerw, Eric Li and Edwin Moy received \$500 each from an endowment established to support the electronics program of Curie Metropolitan High School in Chicago, IL. IPC also donated \$1,000 to the school for educational materials and equipment.

In addition to maintaining a 3.0 GPA in electronics, sustaining a 90% attendance record and establishing a history of achievement in electronics at the school, the students were selected by Curie's electronics instructor, technical department counselor and education-to-careers coordinator after submitting written essays that described their post-secondary educational plans and career goals.

In 2003, *Circuits Assembly* and Technology Forecasters financed the \$10,000 fund through a portion of entry fees from past Service Excellence Awards programs. IPC donates \$2,500 each year to the career academy that includes a magnet school for the arts, a vocational/technical program and an international baccalaureate program.

Curie was chosen as the sole beneficiary because of the school's three-year, hands-on industrial electronics curriculum.



ICs Up Big in Asia Pacific

Stamford, CT – Revenues from semiconductors sold in Asia Pacific will grow 27.4% this year, according to research firm Gartner (gartner.com). Regional sales are expected to reach \$138.8 billion by 2008, a CAGR of 14.3%.

"Riding on the positive wave created in 2003, the Asia Pacific semiconductor industry is poised to propel the global semiconductor market to new heights," said Philip Koh, principal analyst. "Rising demands from end user industries are the key driving force, with China, the electronic equipment manufacturing hub of the world, expected to continue to lead the industry in the region."

Sales to China, the third largest consumer of ICs, will increase 33% in 2004, to \$39.7 billion. Korea is estimated to reach \$16.6 billion this year, driven by cellphones, digital consumer products and flat panel displays.

In Taiwan, growth remains constrained by the shift of production to China, particularly for data processing applications.

Revised Forecast Hurts Semi Tool Sales

New Tripoli, PA – The SIA's latest forecast for semiconductors – 29% growth this year and 4% in 2005, revised from 19% and 6%, respectively – should hurt equipment sales for 2004, according a report recently published by The Information Network (theinformationnet.com).

"Forecasts of a relatively flat 2005 are pointing to eventual pushouts and cancellations of equipment," said president Dr. Robert Castellano. "Semiconductor manufacturers are already overly cautious from the last severe downturn, and fear, uncertainty and doubt about growth in late 2004 and beyond will affect their [buying] decisions."

According to the company, the industry is nine months into the current equipment upswing, while semiconductor sales have been up since January 2002. Historically semiconductor and equipment inflections occurred within three months of each other.

However, the company believes the industry went through a paradigm shift during the past recession, moving to more aggressive die shrinks and to 300-mm processing to increase production. To avoid capacity buildup, semi makers will tie investment to real demand. If demand drops, real or perceived, the equipment market boom will be over before it really got a foothold.

## ICs Turn Down

Trends in the U.S. electronics equipment market (shipments only).

	% Change			
	March	April	May*	YTD
Computers and electronics products	2.5	-1.6	0.5	14.5
Computers	20.0	-15.9	-1.7	21.6
Storage devices	-17.8	3.4	26.0	11.9
Other peripheral equipment	1.9	3.8	-7.2	5.3
Nondefense communications equipment	5.6	-1.9	-3.3	13.0
Defense communications equipment	-0.8	2.9	1.0	-23.0
AV equipment	6.5	-5.1	0.1	-2.1
Semiconductors	3.5	3.2	-2.0	20.0
Components <sup>1</sup>	2.1	-0.2	1.0	8.2
Nondefense search and navigation equipment	-1.2	3.2	1.7	9.4
Defense search and navigation equipment	5.2	5.8	-5.1	10.9
Medical, measurement and control	-10.5	1.5	7.6	16.1

\* Preliminary. <sup>1</sup> Includes semiconductors. Seasonally adjusted. Source: U.S. Department of Commerce Census Bureau, August 2004.

## ISM Says July, Q3 Looking Good

Tempe, AZ – Demand for manufactured products rose in July, reversing a two-month decline. Overall, manufacturing grew for the 14th consecutive month, said the Institute for Supply Management (ism.ws), based on its monthly poll of the supply chain.

The PMI, a leading measure of economic activity, was 62%, up 0.9 points and above the benchmark 50% level for the 14th straight month. New orders grew 4.7 points and production rose 2.9 points.

It is the longest period of growth above 60% since the 12-month period of July 1972 through June 1973, ISM said. "The growth of new orders and production accelerated during the month, adding strength to the index," ISM chairman Norbert Ore said.

Customer inventories declined and remain low by historical measures. Meanwhile, backlogs increased, as did new export orders – and prices paid by manufacturers.

	March	April	May	June	July
PMI	62.5	62.4	62.8	61.1	62.0
New orders	65.7	65.0	62.8	60.0	64.7
Production	65.5	67.0	64.8	63.2	66.1
Inventories	48.3	44.8	49.3	51.1	49.9
Customer inventories	39.5	40.5	37.0	39.0	37.5
Backlogs	63.5	66.5	63.0	58.5	58.0

Source: Institute for Supply Management, August 2004

## Industry Market Snapshot

Book-to-bills of various components/equipment.

	March	April	May	June
Semiconductor equipment <sup>1</sup>	1.09	1.13	1.10	1.08
Semiconductors <sup>2</sup>	32.3%	36.6%	36.9%	40.3%
Rigid PCBs <sup>3</sup> (North America)	1.05	1.01	0.95	0.95
Flexible PCBs <sup>3</sup> (North America)	1.19	1.63	1.87	1.57

Sources: <sup>1</sup> SEMI, <sup>2</sup> SIA (3-month moving average growth), <sup>3</sup> IPC

## Report: High-Rel Computers CAGR 4.4%

Natick, MA – Demand in North America and Western Europe for rugged and industrial computers is expected to grow 4.4% annually through 2006, according to a recent report by Venture Development Corp. (vdc-corp.com). Defense and aerospace will experience the highest growth rates, climbing 5% through 2006.

## Top PCB Makers Have Asian Flavor

New York – The top five PCB makers in 2003 were Japanese, with combined revenue of \$4.57 billion, or 13.3% of the total world output, says a leading PCB market researcher. In this month's *PCD&M* (pcdandm.com), Dr. Hayao Nakahara of N.T. Information says the top 10 makers all hail from Asia, with a combined output of \$7.06 billion. Nakahara pegs the world PCB market at \$34.5 billion. In all, 124 PCB makers had sales over \$50 million in 2003.

Asian Influence	Top PCB Makers
Company	2003 Sales
Nippon Mektron (Japan)	1,175
CMK (Japan)	1,049
Ibiden (Japan)	1,027
Hitachi Chemical (Japan)	685
Shinko Electric Industry (Japan)	636
Unimicron (Taiwan)	609
Samsung Electro-Mechanics (S. Korea)	545
Compeq (Taiwan)	462
Nanya PCB (Taiwan)	453
Daeduck Group (S. Korea)	422
Viasystems (U.S.)	420
Fujikura (Japan)	400
Sanmina-SCI (U.S.)	360
Multek (U.S.)	350
AT&S (Austria)	345

In \$US millions. Source: N.T. Information

## ECA: June Order Index Up

Arlington, VA – Executives from leading manufacturers say the market continued to grow in June, driven by steady gains for a range of goods, including digital cameras, flat panel displays, DVDs and car cockpit electronics.

The monthly order index, compiled by the Electronic Components, Assemblies & Materials Association (ec-central.org), was up in June for the eleventh consecutive month. Most of those polled expect the trend to continue through this year and into next, the ECA said.