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Industry Trends & Events . . .

Outsourcing's Double-edged Sword



A few years ago, the buzz in the electronics industry foretold a wholesale move to outsourcing to smooth uneven production levels and to avoid capital and other costs of in-house manufacturing and test. According to analysts at Frost & Sullivan, however, for makers of test-equipment the reality is considerably less clear-cut. Companies have discovered that no one knows how to test their equipment better than they do, so outsourcing often provides less than satisfactory results. At the same time, economic conditions in the past couple of years have forced those companies to shed some internal manufacturing and test personnel, reducing capacity, encouraging a hybrid approach that limits outsourcing to low-risk, low-complexity cables and assemblies.

Mouser Electronics' Newest Products & Advanced Technologies Event — June 22, 2011

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SNEAK PREVIEW



Join your peers and leading manufacturers for this free, informative, and interactive **ONLINE conference and trade show** — right from the convenience of your PC. Participate in any or all of the educational sessions, network with peers, and meet with manufacturers eager to showcase what's next. [Learn more](#) about the educational sessions offered to meet your information needs, and [register](#) today! You could even win an Apple iPad 2 just for attending!

Participating Exhibitors: Texas Instruments, TE Connectivity, Panasonic Electronic Components, Microchip Technology, Maxim Integrated Products, Honeywell Sensing & Control, Omron Electronics, Littelfuse, Cymbet Corporation, and Lantronix.

SIMPLE SWITCHER® 5A and 10A Power Modules, Now at Digi-Key

Digi-Key Corporation



National Semiconductor's SIMPLE SWITCHER® power modules are the first to drive up to 10A of output current and comply with the CISPR 22 (Class B) radiated and conducted electromagnetic interference (EMI) standard in industrial and communications infrastructure applications. Modules include new features for current sharing and frequency synchronization.

Shielding Effectiveness Kits 1KHz - 18 GHz

A.H. Systems Inc.



The A.H. Systems AK-285R and AK-285T antenna kits includes all of the required antennas needed to perform shield effectiveness. Cables, a tripod with azimuth and elevation head, and a tripod carrying case accompany each antenna kit. Provided with next-day, on-time delivery. See more www.ahsystems.com.

Multi-channel, DC Parametric Tester

ProductionLine Testers, Inc.



The IC200 replaces the common rack-and-stack systems that run several SMU's through a relay matrix. The IC200 offers multiple 4-quadrant, independent VI-sources, perfect for DC

Tektronix MSO3000 Series Oscilloscopes on Sale ValueTronics International, Inc.



With the MSO/DPO3000 Oscilloscope Series, you can visualize analog, digital, and serial signals with a single instrument to quickly find and diagnose problems in embedded system designs. Bandwidths to 500 MHz and a minimum

[analysis of integrated circuits.](#)

- Configurable to 32, 64, and 128 channels
- Has a simple programming grid user interface

of 5x oversampling on all channels provides the performance needed for many of today's mainstream applications. [Learn more...](#)

Delivering Solutions . . .

8 Sockets, 1 Cut-out

Interpower Corporation

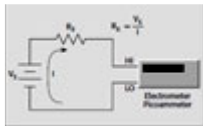


Interpower Corporation makes it **easy** to design for export! We carry [panel-mount sockets](#) for the UK, Continental Europe, France/Belgium, Denmark, Switzerland, Italy, Australia, and South Africa that can all be used in the same cut-out. Sockets can be mounted from the front or rear of the panel. Single or duplex front-mount frames and single front-mount frames with a cover are available. No minimum order requirements. Order online at www.interpower.com.

Test Instruments . . .

[Learn More](#)

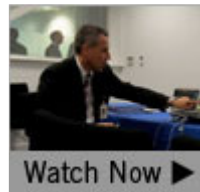
Separating Low-current Measurements from the Noise



Testing materials like graphene, low-temperature superconductors, and highly doped semiconductors requires measuring very small currents. Making *accurate* measurements under such

conditions requires both the proper test instruments and [the proper measurement techniques](#). This comprehensive white paper from Keithley describes the challenges of low-current measurements and presents recommendations to help ensure satisfactory results.

Agilent Chimes In



Watch Now ▶

News of Agilent's claimed game-changing line of oscilloscopes has received a lot of attention in trade magazines and the Internet in the past several months. Reviews have covered the new features and differentiated among the plethora of models. In this video, Peter Kasenbacher, Agilent's

European product-line manager for oscilloscopes, [presents his perspective](#) on it all.

Board and Assembly Test . . .

[Learn More](#)

Testing the Latest Mobiles



Having provided PXI-based test equipment for previous generations of mobile technology, Aeroflex has introduced a complete line of solutions to handle 4th generation long-term-evolution (LTE) technology. The TM500 mobile family has been adopted by

most of the major LTE base-station manufacturers, while their Digital Radio Test Set [verifies performance of user chipsets](#). The instruments are completely backward compatible with their 3G predecessors.

Keeping the Heat Down



Power consumption in consumer electronics has declined steadily over the past several years. Still, the pressure to reduce it further continues to build. Here, Clive Davis of Yokogawa

Europe explores how measurement techniques help companies determine the [power-dissipation consequences](#) of design and manufacturing decisions. In the process he introduces the features of the latest generation of digital power analyzers that can help.

10 Kv Professional Diagnostic Insulation Tester

Duncan Instruments Canada, Ltd.

Why pay more?

For about half the cost of similar units the [MI3200](#) 10 Kv [diagnostic insulation](#) tester provides the following features:

Extech 42530 Infrared Thermometer with Laser Pointer

Fotronic Corporation / Test Equipment Depot

Measure surface temperature of objects which are difficult to reach or unsafe to contact and measure hot spots in electrical panels and equipment. Visit us at www.Testequipmentdepot.com.



software

- PI, DD, and DAR diagnostic tests
- Insulation resistance to 10 TOhms and DC test voltages 500 V - 10 KV
- USB, RS232 port and line or battery operation
- CATIV 600V safety rating and optional



- [Measure from -54 F to 1000 F](#) without contact.
- Large LCD display with backlighting.
- Built-in laser pointer to improve aim.

Inspection & Test . . .

[Learn More](#)

Standing Still for 3D Imaging



Until now, 3D microscopes required multiple lenses or multiple cameras to move around a tiny stationary object. At Ohio State University, researchers have introduced a proof of concept for the first stationary microscope lens that can produce true 3D images. This thermoplastic lens — designed using a computer program written by one of the researchers — [sees nine images at once](#).

Looking for the Small Stuff

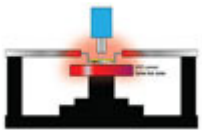


A solder splash on a bonding pad — a recipe for a short. Now you can find it and similar defects using an extra camera for the Goepel automated optical inspection system. The new feature can also find deformations and other [anomalies down to 3 um](#). Depending on where you position the AOI system in your process, you can now inspect bonding pads as well as soldered components.

Test Equipment . . .

[Learn More](#)

Testing Wafers Even When You Aren't There



Ensuring that a wafer is defect-free requires testing it at a range of temperatures. Unfortunately, the deformation caused by temperature changes often means realigning probes and pads, so an operator has to be there. Right? Not according to this white paper from Cascade Microtech. It describes autoprobbers equipped with [probe-to-pad alignment technology](#) that allows the tests to continue unattended.

How Friendly is Your Interface?



The latest consumer electronic craze revolves around smartphones and tablet computers. Yet, observes *Test Points'* Linda Rae, they don't actually offer any new technology. She observes the "cool" quotient depends on an interface that is both intuitive and fun, and suggests that test-equipment manufacturers designing [the next interface for instruments and equipment](#) consider the advantages of that approach.

TES-135 Color Meter

TES Electrical Electronic Corp.



TES Electrical Electronic Corporation introduces the TES-135 Color Meter. Functions of the meter include auto memory with 99 sets, as well as read and [tolerance function](#). To learn more about the TES Corporation, [go here](#).

BK Precision 2542 Oscilloscope, 100 MHz, 1 GSa/s

Bell Electronics NW, Inc.



The [B+K Precision model 2542](#) dual channel Digital Storage Oscilloscope delivers an unmatched combination of performance and value. Advanced features such as FFT function, digital filtering, waveform recorder, delayed sweep/zoom, mask testing, and automatic measurements provide you with powerful tools to debug your circuits. [Learn more...](#)

Careers & Commentary . . .

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Are you "pot bound"? Many engineers have bumped up against their own version of a "glass ceiling." They leave a small organization for a larger one, only to become cogs in a big-business wheel. This column from *The Engineer* describes what could happen. Made increasingly irrelevant by other

engineering groups in the large company, [the engineer's group gets divested](#) — which could end up a good thing.

Diversions . . .

3D Moves Forward



Watch Now ▶

Most recent publicity about 3D displays has focused on the kind that need special glasses and those based on holograms. But the technology doesn't end there. This article and an accompanying video from *IEEE Spectrum* [looks at two alternatives](#) that emerged at this year's Consumer

Electronics Show. They are innovative, unexpected, and the tiniest bit peculiar.

Share Your Thoughts . . .

About This Month's Topic



Are the Walls Closing In?

Have you ever moved from a small company to a larger one or vice versa? Why? Did the new environment meet your expectations or did you discover a new family of constraints and frustrations?

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