microbridge

Next step solutions in electronic calibration... improving productivity and enabling new markets

Newsletter

Microbridge March 2008 eNewsletter

Plenty in the hopper this month

Microbridge continues to expand the product roadmap, based around the revolutionary, award-winning Rejustor technology.

Passive Rejustors

The Rejustor is an adjustable resistor. The resistance of a thin-film element is thermally altered to create a stable, precise resistance. With a low-thermal mass, Rejustors quickly change temperature in response to environmental changes. Low-TCR Rejustors are designed to maintain resistance stability under changing temperatures. eTC Rejustors exploit the thermal agility to respond with a resistance change as a function of temperature. This resistance change, or TCR, can be adjusted along with the absolute resistance.

Microbridge is developing a new family of passive Low-TCR Rejustors for high-temperature applications. These devices target down-hole drilling and aircraft engine monitoring applications.

Active Rejustor Networks

Microbridge is targeting sensor calibration and compensation with a new family of devices that incorporate eTC Rejustors with active CMOS amplifiers. The MBSTC-02, for example, can be used with pressure sensors to provide temperature correction, offset calibration and a 0.5V to 4.5V output.

New devices will be announced that use Low-TCR Rejustors with active amplifiers. These devices target a wide range of applications including sensor calibration. We're also developing compensation products for gas sensors and flow meters.

Rejust-it Software Downloads

Rejust-it Version 3.8 is now available for download at www.mbridgetech.com/downloads.php. The online version requies the software key to operate. Existing customers do not require the key, New customers are required to copy the PsiKey.dll file from the CDROM provided with the MBK-408A kit into the root directory for version 3.8. Any problems with the online version should be addressed to support@mbridgetech.com

NEW PRODUCTS

High Temperature Family

Microbridge is developing discrete Rejustors (singles, duals, dividers) specifically suited for high-temperature applications. The thermally-adjusted polysilicon's long-term resistance drift at high temperatures is predictable and under 1%.

Two different types of high-temperature performance are being targeted:

- Type-1: Hi Temp Rejustors will feature an overall resistance tolerance (including long-term drift) of better than +/-2.5% over an extended temperature range of -55C to +250C, with an ~20% resistance adjustment range. These HT-Rejustors will be designed such that, at a specific elevated temperature (e.g. 200C), the resistance returns to its room-temperature value, within +/-1.0%. Pairs of these HT-Rejustors (unadjusted and adjusted) will maintain their ratio-matching within better than 1% over the entire temperature and adjustment ranges.
- Type -2 Special-purpose Hi Temp-Rejustors will feature a tighter resistance tolerance of better than 0.7% over narrower temperature ranges (e.g. 150C to 200C, 175C to 225C, 200C to 250C). This is intended for high temperature applications where a fine tolerance is desired within a specific "focus-range" of temperatures. These Hi Temp Rejustors will be designed such that their high-temperature resistance values are a specific percentage (e.g. 4.5% +/-0.7%) below their room-temperature value. Pairs of these HT-Rejustors (unadjusted and adjusted) will maintain their ratio-matching within better than 1% over the entire -55C to +250C temperature range, throughout the 20% adjustment range, AND within better than 0.4% within the specific focus-range

Different temperature characteristics and/or focus-ranges may also be feasible. If you would like to know more about these products, please contact Bob Frostholm, Vice President Marketing, Tel: 408-524-1551, Mobile: 650-222-6937, email: bfrostholm@mbridgetech.com

We'd like to hear your ideas. Do you like this product concept? Would you like something similar, yet slightly different? Let us know, contact bfrostholm@mbridgetech.com or call 408-524-1551 and tell us what would be interesting.

Design Challenge Update

We're nearly ready. An independent consultant has almost finished judging the wide range of entries. We'll be ready to award the Mini as soon as we finish collecting the scores. We knew the Rejustor would provide a novel way to improve performance and can't wait to start sharing some of the ideas with you.

TRADE SHOWS

Tokyo Sensor Show 2008 - April 23-25, 2008

Microbridge will be present at the 2008 edition of the Tokyo Sensor show. Visit us at booth No. S-44. This is a great opportunity to learn more about our award winning technology

International Conference on High Temperature Electronics (HiTEC 2008) - May 13-15, 2008

Microbridge will present **Thermally-Adjusted Resistors for Fine-Tuning High-Temperature Electronic Circuits** at the 2008 HiTEC Conference at the Hotel Albuquerque Old Town, Albuquerque, New Mexico, USA. HiTEC Show

REJUSTORS IN THE NEWS

Sensors Magazine
February, 2008
Analog Signal Conditioning Chip from Microbridge
http://electronics.sensorsmag.com/sensorselectronics/BAnalog-Signal-Conditioning-Chip-from-MicrobridgeB/Product/detail/490958?searchString=microbridge

Markt & Technik
2/15/08
In focus article pages 22 through 26 (in German / auf Deutsche)

Microbridge Announces Additional Sales Representatives

Complementing our Distribution Network with Future electronics, serving Colorado, Utah, Idaho, Wyoming and Montana, we are proud to announce the addition of:

First Alliance Technical Representation
Colorado Office 2951 Wyandot Street, Denver
303-433-1648 (phone)
303-433-3814 (fax)

Utah Office
2688 Willowbend Way, Sandy
801-943-2320 (phone)
801-943-2328 (fax)
www.firstalliance.net

ABOUT MICROBRIDGE

Microbridge is the leading manufacturer and licensor of next step electronic calibration products and solutions in the consumer, automotive, medical and other industries that need to improve manufacturing yields and productivity, and enter new markets. Microbridge's resistor calibration products (Rejustor) and enabling technology are the first integrated calibration and temperature compensation systems for analog electronics design and production. The firm enables manufacturers to: cut scrap up to 50%; reduce in-line manufacturing process steps; eliminate binning, work-arounds, laser trimming, hand-sorting and trim-pots; decrease calibration costs by a factor of 10 without sacrificing performance; and return millions of dollars in production savings.

Microbridge's technology enables product designers to achieve one-step calibration and passive adjustment, is adaptive and adjustable in circuit, and it allows calibration in the analog domain to improve the design of current and future products.

For more information, visit www.mbridgetech.com. Companies with product inquiries can contact Microbridge at sales@mbridgetech.com and licensing inquiries can be answered at license@mbridgetech.com

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