

Ridgetop Group, Inc.

6595 North Oracle Road, Suite 153 Tucson, AZ 85704

Phone: (520) 742-3300 Fax: (520) 544-3180 www.Ridgetop-Group.com

## FOR IMMEDIATE RELEASE ...

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## RIDGETOP GROUP ANNOUNCES AVAILABILITY OF A SENSOR FOR REAL-TIME DETECTION OF SOLDER-JOINT FAULTS IN PROGRAMMED, OPERATIONAL FPGAS

Ridgetop Group, Inc., a Tucson-based high technology firm, reported that it has developed a sensor for real-time detection of solder-joint faults in programmed, operational Field Programmable Gate Arrays (FPGAs). The Sentinel SJ BIST<sup>TM</sup> sensor detects high-resistance faults, including opens, in operational I/O networks of programmed, operational FPGAs. SJ BIST correctly detects and reports instances of high-resistance with zero false alarms. Initial testing indicates SJ BIST is capable of detecting high-resistance faults as least as low as  $100 \Omega$ , which last as least as long as one-fourth of a clock period.

Electronic systems that control the aircraft consist of many electronic circuit boards containing parts affixed to the boards using solder. As a metallic compound, solder "ages" and will eventually crack, oxidize, and ultimately fail, causing troublesome intermittent connections between components on the boards. Measurement and prediction of the solder's aging and the resultant impending failure of electronic modules is a vital part of JSF's program of providing overall Prognostics/Health Management (PHM) methodologies to improve operational readiness of its aircraft.

Doug Goodman, Ridgetop's CEO stated, "Most everyone has experienced problems with intermittent behavior in electronic devices, whether it's the car acting up suddenly or a PC failure at a bad time. Electronic prognostics can help mitigate these problems and are a key example of "dual-use" wherein the military and commercial markets share a common concern. We are glad that we were selected by NAVAIR to create solutions and will be working closely with Raytheon to integrate our technology into their systems."

The SJ-BIST product consists of a Verilog softcore that is synthesizable into the customer's FPGA, along with full documentation and application assistance. The product is a new addition to Ridgetop's InstaBIST<sup>TM</sup> family of built-in self test IP solutions. IP Licenses are available.

Ridgetop Group is a privately-held firm founded in 2000 that provides mission-critical electronic prognostics tools, fault-to-failure progression libraries, and semiconductor IP libraries. Customers include NAVAIR, Raytheon, Daimler-Chrysler, ATK/Mission Research, Honeywell, General Dynamics, and DARPA.

For further information, please visit our website at <a href="www.Ridgetop-Group.com">www.Ridgetop-Group.com</a> or contact Milena Thompson at <a href="milena@ridgetop-group.com">milena@ridgetop-group.com</a>.