



AVIONICS: In-flight test instruments for the Airbus A380 and A400M

Thales Avionics chose Sundance's systems for the next generation of particle laser Doppler anemometry test equipments, in-flight data recorder systems for the A380 and new standby LIDAR instruments for the Airbus A400M.

Thales Avionics has successfully deployed the Sundance's hardware solutions for the projects DALEV and NESLIE. The hardware systems are based on the rugged 3U PXI and 3U PXI Express form factors. Xilinx Virtex-4 and Virtex-5 FPGA devices are used to implement the high-performance DSP processing tasks, mainly some very high-speed 1K, 2K and 4K-point FFT cores designed by our favourite IP core supplier.

- The anemometry test equipment sustains a data rate of 640Mbytes/s from a single channel input, execute fixed-point FFT algorithms, DSP calculations and accumulation operations in real-time.
- The in-flight data recorder acquires raw data in continuous mode, without any data loss, from a single 8-bit ADC at the rate of 640MSPS and 400MSPS selectable by software.

"The investment made by Sundance in our ADC technology is testament not only to the technical performance of our solutions but also the cost advantage we provide in very high performance systems."

Andrew Benn, Product Marketing Manager, e2v, U.K.

*"As a member of the PXI community, I welcome Sundance into the large group of successful companies that work together within the **PXI Systems Alliance**. Sundance's technology will lend itself well to the high bandwidth applications enabled by **PXI Express**."*

Matthew Friedman, PXI Platform Marketing Manager, National Instruments, U.S.A.

