Cockpit Audio / Video Communications Audio / Video Data Logging

Design Note #57



Split second decision making keeps these birds in the air. Orchid's Audio/Video cockpit data logger permits post-flight review and analysis.



"Orchid's engineers designed a highly integrated custom five board data logger. From concept to first prototypes in just eight weeks. Nice job Orchid, you're a design team we can count on."

- VP Communications Systems



Orchid Technologies was selected to develop a multi-channel data logging cockpit communications system. Supporting up to four microphones, two NTSC video channels, a variety of general purpose I/O with daylight visible LED enunciators was essential. Ruggedized circuit board design techniques were employed to make this compact piece of avionics gear flight-ready.

Marvell PXA270 ARM Processor

The Marvell PXA270 processor was selected as the main processing element. IIC bus mapped front panel indicators and controls make for a flexible user interface design. Add multiplexed audio codecs from Texas Instruments, USB Bus expanders from OKI and video decoding solutions from NXP to complete the feature-rich design.

Rapid Electronics Product Development

With a trade-show in December, Orchid started the design of this five-circuit-board set in early October. Rapid electronic product development is Orchid's hallmark and this PXA270-based data logger was no exception. Springing into high gear, Orchid's development team delivered first hardware prototypes in under eight weeks. Demo software was running by week ten! The show was a success and our client booked pre-production orders.

Orchid Technologies: Cockpit Avionics

The development of custom electronics products for our OEM clients is Orchid's entire business. High performance, high reliability custom avionics communications systems with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!





ORCHID TECHNOLOGIES
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Custom Engineering From Concept to Production

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