

SPEAr1310 CPU Board Design

Dual Core Cortex-A9 CPU with DDR3 and ECC

Design Note #83



Orchid's SPEAr1310 Board design is top in its class. Complete with Gigabit Ethernet, PCI Express and USB 2.0 connectivity SPEAr1310 excels.



"STMicrosystems SPEAr1310 processor is brand new. Orchid paid attention to each and every design detail. When working out difficult architecture or design choices – its like Orchid has a sixth sense, their design direction was always spot on. Result? Our first revision boards worked with little to no modification. Our prototypes came in under-budget and early. What a success!"

- VP Engineering
Industrial Control Business Unit



ORCHID TECHNOLOGIES
ENGINEERING & CONSULTING, INC.

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Dual Core Cortex-A9 processors support both symmetric and asymmetric multiprocessing. Operating at gigabit data rates, STMicroelectronics SPEAr1310 processor provides an incredible level of processor and peripheral integration. Complete with ECC protected DDR3 memory, Orchid's SPEAr1310-based CPU Board design is feature packed.

• DDR3 Memory with ECC	• USB 2.0 OTG Port
• Gigabit Ethernet Ports	• Fast Ethernet Ports
• PCI Express 2.0 Links	• SATA Gen 2 Host Ports
• USB 2.0 Host Ports	• CAN Bus Interfaces
• LCD Controller 1920 x 1200	• UART, IIC, SPI Ports
• Keyboard Controller	• HDLC Controllers
• NAND Flash Memory	• SD Card Interface
• Dual Cortex-A9 Cores	• Low Power Operation

Highly Integrated and Configurable

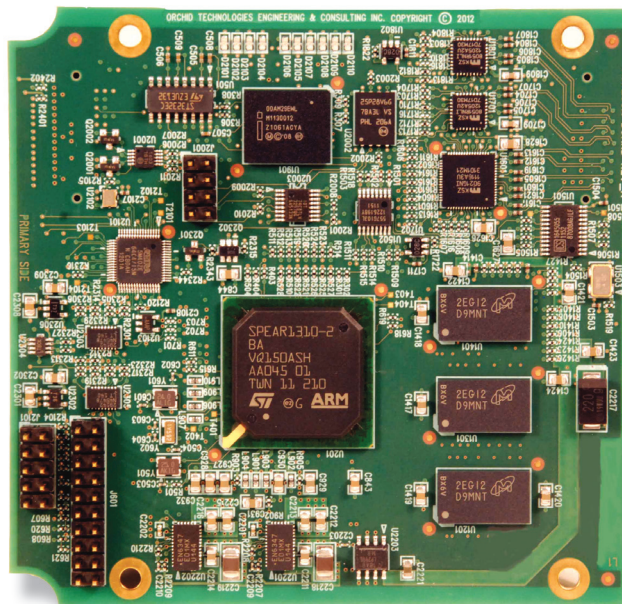
With multiple external bus interfacing options and a highly integrated configurable peripheral set, the SPEAr1310 processor is the perfect processor choice for use in a wide range of industrial, consumer, video, and medical applications.

Low Power SPEAr1310 Processor

At under three watts, the SPEAr1310 dual core ARM Cortex-A9 microcontroller is one of the lowest power processors in its class. Orchid's SPEAr1310 processor design is perfect for heat-sensitive low-power applications.

Orchid Technologies: Low Power SPEAr1310

The development of custom electronic products for our OEM clients is Orchid's entire business. The design of custom electronic products with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!



Custom Engineering From Concept to Production

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