

i.MX6 High Definition Color Image Processor Design Note #112

Medical Electronics – Metabolism Instrumentation



Color coding permits the sorting of biologically active elements. High speed imaging from Orchid Technologies completes the picture.

Metabolism Detection Instrumentation

Metabolism detection instrumentation making use of high color definition CMOS imagers is an effective way to sort biological activity. Multi-sensor, multi-frame CMOS image sensors are used to collect visual sample data on a rapid basis. Automated color sorting algorithms can rapidly identify and sort metabolic activity.

NXP i.MX6 Quad Core Processing

NXP i.MX6 quad core processors with a large DDR3 RAM memory footprint are ideal for the high performance video processing tasks. Hardware-accelerated live image display coupled with high color depth image capture features permit the design of sophisticated image sorting algorithms. Quad core sorting with large high speed DDR3 memory structures provides incredible image processing throughput.

Altera MAX V Imager Assist

An Altera MAX V CPLD performs critical high speed imager assist functionality. The MAX V CPLD is a highly cost-effective means by which critical imager control functions may be realized. Custom Verilog HDL coding from Orchid makes the imaging system complete.

High Speed DDR3 Memory Subsystem

A high speed, 64-bit wide DDR3 memory bank permits the rapid processing of incoming and outgoing video data. 64-bit wide memory allows internal CPU processes to run at comfortable data rates while maximizing overall data throughput.

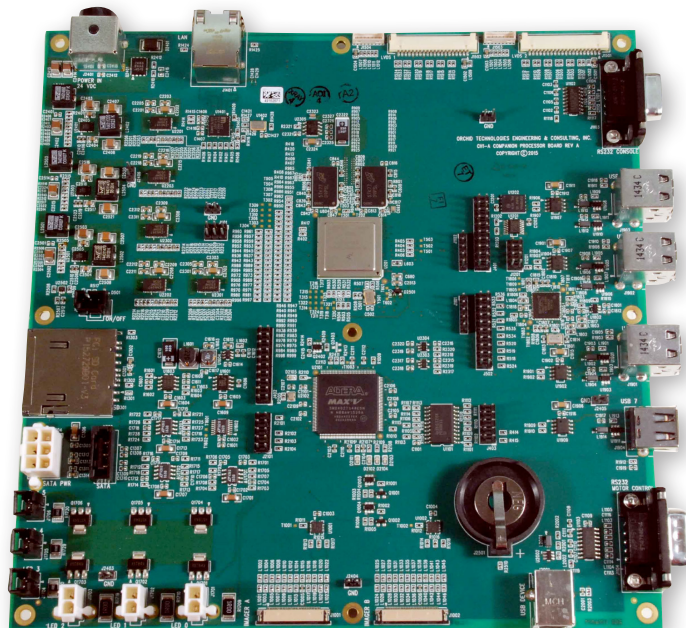


“Orchid really came through with a clever solution to our image processing requirements.”

- Project Manager

Orchid Technologies: i.MX6 Image Processing

The development of custom electronic products for our OEM clients is Orchid's entire business. The design of medical grade i.MX6 Image Processing 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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