HSMC Video Development Design Note #134 Low Latency Video Up-scaler & Chroma Keyer



4K/UHD Video over cabled 12G SDI Coax is becoming today's video standard. OTEC's scaler and low latency chroma key designs lead the way.



"Custom HSMC Compatible boards from OTEC have greatly accelerated FPGA algorithm development".

Imaging Hardware Guy Low Latency Division



ORCHID TECHNOLOGIES

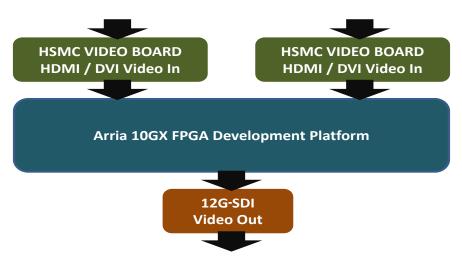
ENGINEERING & CONSULTING, INC.

12G-SDI Broadcast 4K Video

12G-SDI Broadcast Video presents an image with outstanding visual acuity. Taking three simultaneous video sources, OTEC's Low Latency Video Up-scaler and Chroma Keyer provides a selectable, customized, low latency up scale and hardware based chroma key function. With managed latency to under 100 vertical lines, this 4K video device mixes single channel and stereo video inputs on the fly. Video output may be genlocked to any of the three video inputs. Internal test pattern generators and advanced system diagnostics with low power standby modes allows for simple integration.

Intel-PSG Arria 10 FPGA Based Architecture

OTEC's Intel-PSG Arria 10 FPGA Based architecture makes low latency, hardware based chroma keying a reality. The flexible FPGA architecture makes the addition of customized features possible.

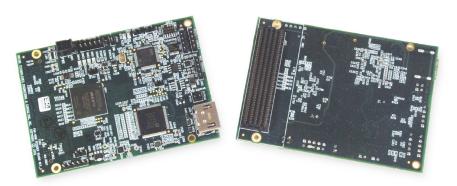


Host Computer Programmable User Controls

OTEC's robust imaging API makes programmable user controls a reality. Based upon OTEC's non-preemptive real time operating system, OTEC's control API allows the rapid selection of video input modes, scaler functions, diagnostics, and chroma key parameters.

Orchid Technologies: Custom Video Solutions

The development of custom electronic products for our OEM clients is OTEC's entire business. The design of Custom Video Solutions 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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