

John Schell

Electrical engineer specializing in FPGA design including system architecture, DDR memory interface/implementation, video interface and processing, video CODEC design, system integration testing and debug, and processor interface. Experienced in hardware/software interfacing and data movement.

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EXPERIENCE

Convergent Design Inc., Colorado Springs — Senior Hardware Design Engineer

2004 - PRESENT

Principal FPGA architect on 4 generations of video recorder design.

Latest generation video recorder is used on numerous movie and TV productions based on reliability and feature set.

Part of team that developed 4k and multi channel video CODEC FPGA implementation.

Designed high speed MIPI video interface to OLED display panel.

Designed high speed, high efficiency DDR3 memory interface to enable 4k and multi HD channel video recording.

Managed engineering team of 8 software and hardware engineers.

Designed high performance SATA interface to enable recording of 4k, multi HD channel, and RAW video.

Agilent Technologies, Colorado Springs — Electrical Engineer Intern

June 2000 - May 2004

Designed hardware interface circuit board and FPGA firmware to convert analog video signal to drive LCD panel of different resolution.

Developed FPGA firmware to draw GUI interface from processor commands including text, objects, and multi layer design

EDUCATION

University of Colorado, Colorado Springs — MSEE

December 2013

Kettering University, Flint, MI — BSEE

May 2004

Magna Cum Laude
Outstanding Thesis Award

SKILLS

FPGA Verilog Design, Simulation, and Debug

Xilinx FPGA design experience including ISE, Vivado, Spartan, Kintex, Virtex, Ultrascale+

DDR/2/3/4 high speed data throughput design

FPGA architecture design, integration, in system debug

HDMI/SDI video interface implementation

Video CODEC design, debug

I2C/SPI interface design, debug

MIPI/LVDS interface design, debug

SATA interface design, debug

Processor interface design, debug

Circuit board design, debug

Power supply design, debug

Other Interests

Playing with my 3 kids (ages 3, 7, and 7)

Highly involved with Cub Scout Pack