

Michael L. Lewis*Home*

2046 Badger Glen
 Escondido, CA 92029
 Phone: (760)735-9147
 E-mail:lewis-michael@home.com

Work

15050 Avenue of Science, Suite 200
 San Diego, CA 92128
 Phone: (619)592-3859
 FAX: (619)592-3786
 E-mail:michael.lewis@trw.com

Education

1987-1989, BS California State University, Fresno. Electrical Engineering
 1992-1994 G.P.A: 3.75 (on 4.0 scale)
 Graduation Date: December, 1994

1995-1996 MS University of California, Santa Barbara. Computer Engineering
 G.P.A: 3.53 (on 4.0 scale)
 Graduation Date: December, 1996

Skills

Programming & Scripting Languages.. Verilog, VHDL, Awk, Sed, Perl, HTML, 8051 Assembly
 Computer Aided Design..... Cadence (Verilog-XL and SignalScan Waveform Viewer,) ModelTech
 ModelSim, Synopsys (Design Compiler/Analyzer, Test Compiler/ATPG,
 Logic Modelling,) Xilinx Foundation
 Specifications..... IEEE Std. 1149.1 (Boundary Scan), PCI 2.1, USB 1.1, USB 2.0

Technical Experience

1999-Present..... Large-team, small-team, multi-site, and solo engineering products and tasks include:

- 1) USB 1.1 Cost-Reduction ASIC: Full-system functional verification and regression, scan vector generation, test engineering liason.
- 2) USB 2.0 Bus Functional Models (Host and Monitor): Behavioral design, verification, testbench enhancements (including packet/transaction-based tasks, and text I/O processing,) documentation, and corporate-wide integration (used on four projects to date.)
- 3) USB 2.0 Integrated Microcontroller Peripheral: RTL design (IP used on four projects to date,) full-system functional verification and regression, Synopsys library model generation, scan vector generation, and documentation. Three patents filed.
- 4) USB 1.1 IP Transfer: provided customer with IP-quality database, documentation, electronic transfer, on-site training, design and verification assistance.
- 5) Bluetooth Integrated Microcontroller: USB-side functional verification, testbench generation, and documentation.

Cypress Semiconductor, Interface Products Division. San Diego, CA

1997-1999..... Large-team, small-team and solo engineering products and tasks include:

- 1) 100K-gate Multi-bus Interface ASIC: RTL design, testbench generation, functional verification, and documentation.
- 2) Low-latency Signal Processing Module: HW/SW integration and test, work-around solutions, die-level hardware work-arounds with focused ion beam technology, avoided costly ASIC re-spins, schedule delays, and late customer deliveries.
- 3) High-speed Parallel-to-Serial Bus Interface FPGAs (Master, Slave, and Monitor): RTL design, testbench generation, functional verification, synthesis, place and route, timing analysis and simulation , documentation .

TRW, Avionics Systems Division. San Diego, CA.

1996..... Contracted in the design process of a PCI-FDDI interface ASIC for a network interface card. Tasks included VHDL design, simulation and verification, and documentation. *Rockwell Network Systems. Santa Barbara, CA*

1994..... Performed quality assurance, product testing, RMAs, manufacturing, field applications, and customer technical support for telemetry monitoring engineering firm. *Digital Prototype Systems. Fresno, CA*

Publications and Patents

“Adopting Software Methods for VHDL Design” *Integrated Systems Design.* October, 1999.
 “Testing a super-fast part on a super-cheap tester” *Cypress International Technical Conference.* June, 2000