

ERIC-ODESSIT

SUMMARY: Strong experience with Analog and Power Electronics, as well as with Embedded Controllers and FPGAs. Experience using C and Assembly languages. Proficiency with Computer Aided Design tools.

WORK EXPERIENCE:

June 2004 to
Dec. 2008

SOLECTEK CORPORATION, San Diego, CA. SR. HARDWARE ENGINEER.

Participated in the design of Solectek's SkyWay 7000[™] wireless access point system. Integrated OEM main board into the system. Redesigned power system for the previously existing RF power amplifier to make it suitable for the SkyWay 7000 system. Designed microcontroller-based Controller board that provided means of power control for the SkyWay 7000 system and sound for audible antenna alignment. Developed firmware for the microcontroller used in the Controller board. Integrated OEM Host and Baseband boards for the WiMAX base station. Debugged Freescale's Direct Slave Interface (DSI) bus for this integration. Redesigned the Baseband board for performance stability and cost reduction. Designed power and digital sections of the WiMAX base station 36dBm RF amplifier. Developed communication protocol for the interface between the microcontroller used in the RF amplifier and the Host board, as well as an algorithm for controlling and maintaining the bias current for each Class AB cascade of the RF amplifier. Designed firmware for the microcontroller used in the amplifier. Designed proprietary CompactPCI Uplink card for managing and synchronizing up to 4 WiMAX base stations. Developed communication protocol for the interface between the CompactPCI CPU card and the Uplink card, as well as the protocol for the auxiliary RS-485 interface between the Uplink card and the base stations. Designed field-upgradeable firmware for the microcontroller used in the Uplink card. Was involved in the successful transfer of the WiMAX program to production.

Dec. 2003 to
June 2004

DI/DT, INC. (POWER ONE), Carlsbad, CA. DESIGN ENGINEER.

Designed serial interface hardware for Universal Automatic Tester used for testing of DI/DT power supply modules. Developed RS-485-based communication protocol for this interface, as well as firmware for the microcontroller used as Serializer-Deserializer in this interface circuit. Supported existing power supply modules as well as worked on the new generation microcontroller-based power supply modules.

July 2001 to
Jan. 2003

IPITEK, Carlsbad, CA. DIGITAL DESIGN ENGINEER.

Designed Digital Status Monitoring circuitry and firmware for the QAM Optical Transmitter. Maintained and improved firmware for EDFA Optical Transceiver. Specified multi-chassis Status Management System for IPITEK's MuxLink[™] product line. Developed RS-485-based inter-chassis communication protocol, as well as I²C-based intra-chassis communication protocol. Designed Chassis Management Unit for MuxLink[™] products, as well as firmware for the microcontroller used in this unit. Developed Chassis Management Unit Test Board and Module Simulator necessary to test the MuxLink[™] management system concept. Additionally, designed Thermo-Electric Cooler power supply and Hot Swap circuitry used in the Gigabit Ethernet module.

Apr. 1996 to
June 2001

TADPOLE-CYCLE, Carlsbad, CA. DESIGN ENGINEER.

Designed intelligent Power Supply and Management system for 3 generations of portable SUN and HP workstations. Specified firmware required for the Power Management Controller. Developed Smart Battery Control System interfacing with the Power Supply Module. Defined I²C based protocol for the Battery Control System Interface, as well as for the new Power Management Interface. Designed firmware for the embedded controllers responsible for the power management. Developed FPGA-based support logic required for embedded controller's operation. Additional responsibilities included designing PCI-based Audio, Graphics and IDE daughter card for a portable server, updating an existing Graphics card for a different type of LVDS interface to the LCD and helping to resolve EMI problems.

Aug. 1993 to
Apr. 1996

SAI TECHNOLOGY, San Diego, CA. DESIGN ENGINEER.

Participated in design of microprocessor controlled backlight drivers for military and commercial Liquid Crystal Displays. Developed and debugged various parts of backlight electronics. Evaluated new ICs for backlight applications. Designed automatic tester for backlight assembly and power supply for Liquid Crystal Display as well as temperature and brightness control circuits for computer and LCD systems. Worked on computer and display systems integration.

Jan. 1993 to
June 1993

PULSE ENGINEERING, San Diego, CA. DESIGN ENGINEER-CONSULTANT.

Designed DC/DC converters for Local Area Network and PCMCIA applications. Breadboarded and tested the prototypes. Supplied all the paperwork needed for production of the converters as well as application of the PULSE ENGINEERING transformer used in the converter.

Oct. 1991 to
Oct. 1992

VALOR ELECTRONICS, INC., San Diego, CA. ASSOCIATE ENGINEER.

Participated in design of DC/DC converters for computer networks. Breadboarded, debugged and developed experimental power supplies. Evaluated new ICs. Modified existing products. Provided failure analysis for QA department.

EDUCATION:

1981-1986

Bachelor of Science in Electrical Engineering.
POLITECHNICAL UNIVERSITY OF TRANSPORTATION, Leningrad, USSR.

Fall of 1999

Completed Digital Signal Processing Extension Course.
SAN DIEGO STATE UNIVERSITY, San Diego, CA.

REFERENCES:

Available upon request.

Citizenship Status:

US Citizen, naturalized in 1995.