Sam Smith

1700 Main Street New Brunswick, New Jersey 08333

Home: 732-300-1555 e-mail: smith@comcast.net Cellular: 732-299-1188

PROFESSIONAL SUMMARY

A highly motivated professional with a diversified background in both hardware and software development. Detail oriented individual with demonstrated skills in problem solving. Works well under pressure in either group settings or on an individual basis. Excellent analytical, interpersonal and organizational skills.

EMPLOYMENT HISTORY

6/1999 - Present

Tyco Telecommunications, Eatontown, New Jersey

Member of Technical Staff - Embedded Systems Engineer

- Responsible for the evaluation of new embedded processors for new projects.
- Responsible for the design and schematic capture of the embedded processor circuitry and surrounding glue logic for various projects.
- Responsible for interfacing with all hardware designers to properly integrate the embedded processor schematics and peripherals in the overall board design.
- Responsible for the development of various firmware applications, for projects such as the Terminal Line Amplifier (TLA), In-Line Amplifier (ILA), and High Performance Optical Equipment (HPOE).
- Typical firmware applications include PID algorithms for laser temperature and power control, redundant laser source sharing algorithms, alarm monitoring and fault management, backplane communication interfaces for the shelf/bay controller (via CAN / RS-422), and bootloader applications for remote field upgrades.
- Developed specialized low-level drivers for all MCU peripherals, like SPI, I²C, SCI, TPU, PWM, ADC, flash and EEPROM modules, and other off-chip devices such as ADC, DAC, Digital Potentiometers (EEPOTs), etc.
- Major contributor to overall shelf/bay architecture on topics ranging from mechanical packaging, to backplane communications, field upgrade methodologies for firmware and FPGAs, and shelf/bay controller design.
- Active participant of all product design reviews and architecture meetings.
- Responsible for authoring architecture and specification documents.
- Responsible for interfacing with 3rd party vendors and contractors for the development of smaller project subsystems.
- Interviewed new applicants and mentored new employees joining our team.

10/1998 – 5/1999 New Jersey Institute of Technology, Newark, New Jersey

Biomedical Engineering Department Researcher

Researched and developed a real-life project for the New Jersey Institute of Technology and the University
of Medicine and Dentistry of New Jersey. The project was an enhanced PC-based electrocardiogram data
acquisition system.

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5/1998 – 8/1998 <u>Lambda – Electronic Measurements, Inc., Neptune, New Jersey</u>

Summer Co-op Experience - Assistant to Digital Design Engineer

- Assisted in designing microcontroller-based analog and digital circuits
- Developed test procedure documents for new products

2/1997 – 11/1997 **JGB Consulting, Inc.**, Point Pleasant, New Jersey

Co-op Experience - Assistant Test Engineer

- Developed test procedures using ATE equipment
- Assembled/configured custom ATE test beds

EDUCATION New Jersey Institute of Technology, Newark, New Jersey

Degree Candidate, Master of Science in Telecommunications, May 2004

GPA: 3.33

New Jersey Institute of Technology, Newark, New Jersey

Bachelor of Science in Electrical Engineering Technology, May 1999

GPA: 3.14

HONORS

- Co-op Student of the Year in Electrical Engineering Technology, 1998
- Dean's List, 1996 1999

OTHER TRAINING

- Integrated Systems: Introduction to pSOS
- WindRiver: vxWorks AE Quick Startup
- WindRiver: Advanced Wind River Tools Training
- Altera: APEX 20K Device Architecture Basics
- Altera: Project Management & Compilation Using Quartus Software