

JAMES ALLEN BUSLEPP

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SUMMARY

Dedicated, creative, resourceful Electronics Engineer with 21 years experience successfully bringing ideas into production. Detail oriented while keeping the overall program requirements and goals firmly in mind. Primary expertise in analog, RF and mixed-signal circuits and systems. High standards of professionalism, quality, honor and integrity. Highly adaptable team player with short learning curve. Excellent written and verbal communication skills, including public speaking.

AREAS OF EXPERTISE

- System design and integration
- Embedded microprocessor systems
- Communication systems
- Circuit design: digital, analog, video, RF
- RF power amplifier design
- Transmission line theory and design
- Printed circuit board (PCB) design and layout
- Schematic capture and PCB layout using PADS, PCAD and ORCAD
- C/C++ Programming
- HTML, CSS web development
- Cost analysis and make vs. buy analysis
- Project management
- Supplier selection and management

SELECTED QUALITIES

- Able to find creative and innovative solutions to difficult problems
- Meticulous about important details without losing sight of the "big picture"
- Public speaking
- High standards of quality, honor and integrity
- Highly adaptable with short learning curve
- Able to accept and integrate constructive criticism
- Customer oriented
- Results oriented

EDUCATION

Classes in C++ and JavaScript, Schoolcraft College, Livonia, Michigan GPA: 4.0, 2005, 2006

BS in Electrical Engineering, Washington University, St. Louis, Missouri GPA: 2.3, 1985

ENGINEERING EXPERIENCE

Masco Corporation Taylor, MI. Sr. Electronics Engineer 2005 to Present www.masco.com

Masco is a Fortune 200 supplier of home improvement products.

Performed design engineering of electronic subsystems to be embedded in products such as faucets, windows and spas. Evaluated designs of subcontractors. Evaluated new technologies for their applicability to Masco's products. Coached younger engineers.

- Developed the hardware for an ARM-9 based controller to serve as a USB host and digital media player embedded in a spa (patent pending).
- Selected an ISM-band radio chip to be the corporate standard.
- Developed hardware and embedded software (in C) for a RF remote control unit.
- Participated in kaizen events for product and process development.

Brooks Automation Sylmar, CA. Sr. Electronics Engineer 1999 to 2003 www.brooks.com
Brooks Automation provides tools and automation to the semiconductor industry.

Performed sustaining engineering and new product development of the control electronics for Brooks line of semiconductor wafer sorters. Developed architectural alternatives for new sorters and modifications to standard products to meet customer specific requirements. Extensive interface with software, purchasing and production departments.

- Developed ESD immunity improvements to wafer sorters that quadrupled system-level MTBF.
- Created a conceptual design of the control electronics of 300mm semiconductor wafer sorters.
- Oversaw redesign of ISA 4-axis step motor control board to eliminate obsolete parts and improve reliability.
- Designed an intelligent embedded controller for a servo-driven wafer indexer.
- Designed a PC104 interface board for Windows NT based motion-control applications.

Geospace Research, Inc. El Segundo, CA. Sr. Electronics Engineer 1997 to 1999

Geospace Research is a very small company (3 employees) performing government-funded basic scientific research, primarily in atmospheric physics.

Designed and fabricated specialized radar systems for experiments in atmospheric physics.

- Designed and implemented a 139 MHz phased array radar system currently deployed at the HAARP facility (www.haarp.alaska.edu).
- Designed a 300W 139 MHz radar power amplifier circuit board.
- Designed a digitally controlled phase shifter for scientific UHF phased array radar.
- Designed and implemented digital and RF experiment-specific interface circuitry for the Arecibo Observatory's (www.naic.edu) HF atmospheric heater.

Standard Communications Corporation, Torrance, CA. Project Engineer 1991 to 1996

www.standardcom.com

Standard Communications manufactures receivers, modulators and other products for the cable television industry.

Developed new products performed and sustaining engineering of existing product lines. Extensive interface with software, purchasing, production, production test and marketing departments.

- Lead the systems design teams for the revolutionary "Stratum" television modulator system, ALM1000 modulator system and CAM830 satellite receiver remote control.
- Initiated numerous improvements in the configuration control procedures.
- Designed the backplane for the Stratum TV modulator system, routing digital control, analog video, TV IF (45 MHz) and RF (55 - 550 MHz) signals including signal switching for automated backup for 8 cable TV modulators.
- Designed a reference oscillator PCB for Stratum modulator system.
- Designed PCBs used to send and receive FSK digital data on the aural subcarrier of an analog TV signal.
- Corrected production test methods for measuring spurious emissions from modulators.

Lockheed Aeronautical Systems Co. Burbank, CA. Avionics Project Engineer 1986 to 1991

www.lockheedmartin.com

Developed and negotiated specifications for development or modification of avionic systems for integration into US Navy aircraft. Supervised development, test qualification and production of this equipment by subcontractors. Extensive interface with the customer representatives and the program, procurement, reliability, electrical, EMI and document control departments.

- Integrated the communication systems on the ES-3A aircraft including HF, VHF, UHF and SATCOM radios, IFF, link-4 and link-11 data links and digital intercom.
- Found & fixed a design flaw in S-3A wing rack driver, preventing inadvertent weapons release.
- Designed radar-blanking system for ESM receivers (ES-3A aircraft).
- Investigated the feasibility of using hard-wired T connections for bus couplers on 10 MHz manchester LAN (ES-3A aircraft).

MANAGEMENT AND SALES EXPERIENCE

City Market Pagosa Springs, CO. Fuel Station Manager 2004 to 2005

Ensure the smooth daily operation of the fuel center. Train operators. Maintain training regulatory compliance logs. Monitor operator skills and performance and provide training or correction as needed. Research and take appropriate action for any monetary or inventory discrepancies. Ensure that all needed facility maintenance and repairs are performed. Ensure excellent customer service is provided.

Mountain Classic Mortgages Pagosa Springs, CO. Mortgage Loan Specialist 2003 to 2004

Developed relationships with realtors and developers to gain referrals of potential borrowers for mortgage loans. Served as team leader supervising three other Mortgage Loan Specialists. Worked with clients and representatives of over 50 lenders to gather the information and documentation necessary to secure mortgage loans that meet the needs of the individual client.

- Developed the company web site, www.mountainclassicmortgages.com.