

## Steve Champion

Cambridgeshire, UK

## Senior Hardware Engineer

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### Summary

US & UK citizen with over twenty years experience as an Electronics Engineer, in UK/USA/Australia, including:

Hardware design:

- Design of DS3, OC-3, T1/E1, Gigabit Ethernet, xDSL, ISDN, ATM, VoIP, AdvancedTCA hardware
- Design with IXP1200, IXP425, X-Scale, PowerPC, 8260, R5000, i960, 68k, 8088, 8051, PIC
- CPLDs, FPGAs, DMA, TDM, Graphics controllers, 802.11, UWB
- UL/FCC/CE emissions and susceptibility testing and certification
- OrCAD, ViewLogic, FPGA tools (AHDL, VHDL), etc.
- Surface Mount Technology, Commercial, COTS, Space
- Extensive liaison with Software, Board layout, Manufacturing, & Test departments

Software/Firmware design:

- Design & coding in assembler (IXP1200, 8051, etc.)
- C (including Archimedes C for 8051). Embedded real-time systems
- Software customer support & training

Engineering management:

- Product development - concept through production release
- Specification & system architecture. Project planning, scheduling, & tracking, liaison
- PLM and MRP systems – Arena (BOM.COM), Agile, Man/Man
- Development & implementation of procedures. PLM implementation
- Management of design team, drafting, agency certification, component engineering

### Experience

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|--------------------|--|
| Apr. 07 to Present | <b>UBISENSE</b> Ltd., Cambridge, England<br>Senior Hardware Engineer<br>Design and product development for Ultrawideband asset and personnel location system.  |
| Jan. 04 to Apr. 07 | <b>AITECH SPACE SYSTEMS</b> inc./ <b>AITECH DEFENSE SYSTEMS</b> inc., Chatsworth, California<br>Lead Engineer, Space Systems<br>Designed rugged PowerPC-based cards for Space and Military/COTS applications   |
| Aug. 02 to Jan. 04 | <b>STRIX SYSTEMS</b> inc., Westlake Village, California<br>Senior Engineer<br>Designed IBM 405GP and Intel IXP425-based Wireless Networking equipment  |
| Jan. 01 to Jul. 02 | <b>CLARENT CORPORATION</b> Inc./ <b>IVOX NETWORKS</b> , Inc., Calabasas, California<br>Senior Engineer<br>Designed IXP1200-based Voice over IP hardware.<br>Designed & implemented IXP-1200 IX-Bus bridge FPGA. IX-Bus - UTOPIA bridge FPGA.   |
| Aug. 96 to Nov. 00 | <b>ZHONE TECHNOLOGIES</b> Inc./ <b>CAG TECHNOLOGIES</b> , Inc., Westlake Village, California<br>Senior Engineer<br>Designed HDSL2/ADSL/SDSL, ATM, DS3, T1/E1, ISDN, Frame Relay hardware.<br>Designed IXP1200, i960, R5000-based hardware.<br>Designed hardware & wrote embedded software for 80552-based sports training equipment. |

- Dec. 94 to  
Aug. 96      **BIBLOGIC COMPUTER SERVICES**, Thousand Oaks, California  
Consultant  
Miscellaneous FCC/UL consulting. Built web sites for several non-profit organizations.
- Aug. 89 to  
Dec. 94      **CARDKEY SYSTEMS** Inc., Simi Valley, California  
Senior Engineering Specialist/Manager Hardware Engineering  
Managed design & development team, drafting, agency certification & Comp. Eng. functions.  
Developed & implemented a New Product Development Procedure.  
Managed development of a new access control panel from design to production release in record time with minimum resources.  
Designed 8051-based access control panel modules, including writing firmware.  
Designed & wrote firmware for Z80-based MS-DOS compatible floppy disk system.
- Sep. 85 to  
Jul. 89      **UNIVERSITY OF QUEENSLAND**, Dept. of Physical Therapy, Brisbane, Australia  
Chief Scientific Officer  
Wrote software for capture and analysis of muscle signals.  
Wrote database applications for clinic/staff records, etc. using dBASE III+/Clipper.  
Designed and built miscellaneous laboratory hardware.  
Trained staff & students in electrical safety, word-processing, etc.
- Sep. 86 to  
Jul. 89      **BIBLOGIC COMPUTER SERVICES**, Brisbane, Australia  
Owner  
Wrote PC Software for bibliographic database management.  
Marketed software to academic institutions.  
Wrote software for custom database applications using dBASE III+/Clipper.
- Jun. 84 to  
Sep. 85      **CORONA DATA SYSTEMS** Inc./**CORDATA**, Inc., Westlake Village, California  
Senior Hardware Design Engineer  
Designed high-resolution graphics card for PC.  
Wrote drivers, test, demo software for graphics card using C.
- Feb. 83 to  
May. 84      **JEABOROUGH** Ltd., Milton Keynes, England  
Hardware Design Engineer
- Aug. 81 to  
Feb. 83      **IMMEDIATE BILLING SYSTEMS** plc., Milton Keynes, England  
(Formerly a division of **PLESSEY MICROSYSTEMS** Ltd.)  
Hardware Design Engineer
- Jul. 80 to  
Aug. 81      **MARCONI RADAR SYSTEMS** Ltd., Leicester, England  
Hardware Design Engineer

#### Education

- Sep. 76 to  
Jul. 80      **B. Eng. Hons. (First Class), Electrical and Electronic Engineering**  
**UNIVERSITY OF BRADFORD**, Bradford, England  
Graduated top of class. Awarded IEE prize for distinction.  
Four year course including twenty months in industry, at Marconi Radar Systems.  
Thesis: "A development system for the Motorola M6809 microprocessor".
- Aug. 89 to  
Present      **Miscellaneous Training**  
Crosby Quality Education System.  
Situational Leadership.  
Managing Priorities & Meeting Deadlines.  
How to Plan & Administer a Budget.  
Management Problems of the Technical Person.