Roy Ward   Redmond, WA

Linked In: https://www.linkedin.com/in/roybward/

CAREER SUMMARY:

Experienced, versatile **Electrical Hardware Engineer**, proficient in designing high volume, low margin consumer electronics and solving issues combining complex software, circuit board, SoC, and integrated circuit development, debug, manufacturing bring-up, cost-down, and root cause analysis. Proven, quick learner, comfortable in a fast paced, multitasking, work environment. Self-motivated, team player experienced in collaborating with, managing, training, and mentoring colleagues, vendors, and customers, both domestically and internationally.

TECHNICAL PROFICIENCY:

1 Mentor Xpedition, Cadence, Altium	5 Spectrum, Network, Logic, and bus analyzers
2 SPICE, Hyperlynx, Verilog	6 Bus design (PCIe, USB, DDRx, 1GBaseT, SPI)
3 C/C++, Assembly(AVR, 8051,BSP™)	7 LiIon battery charging circuits.
4 ARM, x86 based embedded system design	8 Rework equipment (hot air, 0201, etc)

WORK EXPERIENCE:

MetaPower, Seattle, WA   July, 2020 – Mar, 2021
Electrical Design Lead

Commscope, Redmond, WA (Purchased ARRIS)   Jan, 2019 – May 2020
Distinguished Hardware Engineer – Project EE lead, responsible for product electronic design and sustaining support.

- Developed Gateways(2.5Gbase-T, WiFi 6, USB 3.1, DDR, VOIP, DOCSIS 3.1, GPON) products based on Broadcom or Intel SoCs. (with 1M+ annual unit production.)
- Supported NPI at CM partner facilities in Asia through mass production and beyond.
- Developed product requirements for ODM projects.
- Proven ability to predict, solve, and address design issues before they impact build schedule.

RW TECHNOLOGY, Redmond, WA   2018 - current
Principal Consultant

- Hardware design consulting and review.
- NPI and board bring-up at Jabil Cuidado Chihuahua facility

ARRIS, Kirkland, WA (Purchased Digeo)   2009 - 2019
Distinguished Hardware Engineer – Project EE lead, responsible for product electronic design
and sustaining support.

- Developed DOCSIS 3.1 Gateway(2.5Gbase-T, WiFi 6, USB 3.1, DDR, VOIP) products
  based on Broadcom or Intel SoCs including NPI support at CM partner facilities in Asia.
- Moxi HD DVR Gateway and IP set-top box hardware development. (1.5 million unit
  installed base)
- Contributing member of CableLabs Energy Star, Reduced Energy Set-top and Gateway
  Working Groups.
- Developed Atmel processor based capacitive touch control hardware and firmware.
- Developed tools to speed common tasks (C++, PHP, Javascript, SQL, bash, perl)

Digeo, Kirkland, WA   2007 - 2009 A
Paul Allen backed company developing HD DVR cable set-top boxes and the Moxi™ user
interface.
Principal Hardware Engineer – Responsible for coordinating ODM Hardware design.

- Developed and managed Broadcom and Intel based hardware designs with ASUS
  (hardware ODM.)
- Managed and communicated technical interactions between local software development
  and ASUS hardware engineers.
- Contributed on CableLabs OpenCable hardware ECR working group.
- CableLabs M-UDCP (retail set-top) certification (allowing M-UDCP self-certification)

Peltronic, Bellevue, WA   2006 – 2013
Partner – Formed and managed partnership LLCs (WA and CA) providing continuing software
support for the EQUATOR BSP™ Processor.

- Provided continuing support for Equator customers to complete designs.

Pixelworks, Seattle, WA (Formerly Equator Technologies)   1999 – 2006
Sr. Customer Support Engineer – Lead support engineer, responsible for providing technical
customer support, training, and custom development on Equator media-processors, reference
boards, software tools, libraries, and drivers. Developed and maintained customer support team
tools. Managed factory application engineering team (2001-2002).

EDUCATION:

BS Electrical Engineering with Digital Design emphasis, University of Washington, Seattle

EE588 Advanced Laser Engineering, University of Washington, Seattle

Graduate Seminar courses EE and CSE topics including MEMS and configurable computing, University of Washington, Seattle