

GLENN E. RUBY
2024 Westlake Drive
Plano, TX 75075

972-423-5956

GlennERuby@gmail.com

TECHNICAL LEADER – DESIGN, EDA/CAD APPLICATIONS, PROJECT MANAGEMENT

Engineering professional with extensive experience gained working with industry leaders Texas Instruments, General Instrument (Motorola Mobility), and Cadence Design Systems. Design background in defense and commercial electronics, specialization in Electronic Design Automation methodologies and applications, and expertise in software technology adoption, training, and management of client engagements. Intellectually curious and driven to help people succeed with new technology solutions. Open to relocation and travel.

EDUCATION

MS, Electrical Engineering, Southern Methodist University, Dallas, TX

BS, Electrical Engineering, Case Western Reserve University, Cleveland, OH

EXPERTISE

Electronic Design Automation

- Integrated Circuit Design Solutions
- EDA Methodologies / Development
- Analog / RF / Mixed Signal Design
- OpenAccess / Database Migration

Product / Methodology Adoption

- Client Engagement Programs
- Sales / Technical Support
- Product / Methodology Training
- Implementation / User Support

Hardware Design Engineering

- Analog / Video / RF
- Defense Systems / CATV

Training and Development

- Instructional Design
- Presentation / Web Development

PROFESSIONAL EXPERIENCE

CADENCE DESIGN SYSTEMS, Headquarters in San Jose, CA 1995 – 2009

Cadence develops electronic design automation software and hardware used worldwide to design and develop integrated circuits, and electronics systems.

Technical Leader (2002-2009)

OpenAccess (OA) Migration and Virtuoso IC 6.1 Adoption Program

Defined and executed strategy to migrate customers to OA, an open standard database for IC design, in a paradigm shift for the semiconductor industry. At the core of an OA based solution, the Virtuoso platform, a \$350M business with 80%+ market share, enables enhanced design capabilities, streamlined flows, and increased productivity.

- **Solution / Methodology Development** – Employed a structured migration process based on detailed assessments of client environments and data resulting in successful migrations verified against validated metrics. Implemented new methodologies enabling clients to realize gains in design capability and productivity with an OA based solution.
- **Client Engagement** – Conducted 20+ customer pilot projects with training, migration support, methodology improvement, and product support. Three month focused engagements ensured successful transitions. Improved cross platform digital implementation flows eliminating error prone and time-consuming translations.

CADENCE DESIGN SYSTEMS, continued**Technical Leader** (2002-2009)***OpenAccess (OA) Migration and Virtuoso IC 6.1 Adoption Program***

- **Customer Support** – SME and advisor on OA, data migration, and platform adoption. Implemented solutions to Process Design Kit setup, the OA technology database, platform interoperability, and physical implementation / layout tool functionality.
- **Training Development** – Developed training and the knowledge base, leading the team in managing and editing content as the technology evolved with continuous improvement based on lessons learned through client engagements.
- **Product Engineering** – Working with R&D and client CAD teams, interpreted and translated details on OA, PDK's, and tool functionality into solutions. Supported R&D with release documentation, utility scripting, and usability issue resolution.
- **Customer Enablement** – Published the IC 6.1 Adoption resource website. Developed and presented demos, papers, and workshops at industry and user conferences, giving customers the confidence to proceed with adoption.
- **Field / Sales Enablement** – Trained support and sales teams to engage and assist global customers on OA migration. Implemented a self-paced client engagement process to scale the program and reach additional customers with trained personnel.

Design Flow Engineer (2000-2002)***Analog / RF / Mixed Signal Design Methodology***

Developed a top-down / bottom-up design methodology to improve chip level circuit simulation flows with behavioral modeling in the Virtuoso Analog Design Environment.

- **Solution Development** – In a systems approach to IC design, employed top-down behavioral modeling for early stage functional verification. Bottom-up transistor-level design blocks replaced those models as chip design progressed. A mix of refined VerilogA models for speed and transistor-level models for accuracy in critical blocks enabled and improved full chip simulation times.
- **Client Engagement** – Partnered with an RF / Wireless customer proving the solution in a space where system modeling is critical and full chip simulation is challenging.
- **Field / Customer Enablement** – Published the AMS Design Environment website documenting the methodology and capturing best practices for setting up the environment, constructing behavioral models, and executing the design flow. The result earned customer confidence in the tools as a solution.

Field Applications Engineer (1995 – 2000)***Analog / RF / Mixed Signal Design and Simulation***

Provided call center support, training and onsite services to customers of Cadence custom IC design software products and solutions.

- **Customer Support** – Maintained customer productivity with software installation, licensing, and analog / custom IC design tool expertise – DFII, Composer schematic driven layout, Analog Design Environment, and Spectre / SpectreRF simulation.
- **Technical Training** – Conducted product training on analog / RF design tools with consistently high satisfaction rates. Developed customized training and augmented standard course offerings to address client specific requirements and methodologies.
- **Client Engagement** – Embedded in the Texas Instruments Analog / Mixed Signal group providing customized tool / methodology training and frontline support on the TI design environment and analog / RF simulation for a design community of 400+.

GENERAL INSTRUMENT, Carrollton, TX**RF / Analog Design Engineer** (1990 – 1995)***CATV Equipment Design***

Developed cable television hardware – analog set-top converters with operator requested features for residential use and video processing hardware installed in operator head-ends.

- **Design** – Improved received picture quality for consumers by redesigning the video encryption baseband processing hardware at the head-end, providing a precise, stable signal source that was an easily maintainable solution for cable operators.

Developed additional audio features for standard set-top model – dual audio program, audio scrambling.

Developed a set-top model with premium channel reception tunable as an off-air channel from the TV allowing the consumer full use of the TV's features. Redesigned the RF signal path and inserted the channel in a spare VHF carrier location.

- **Prototype / Test** – Designed and built PCB, RF module, and set-top prototypes. Conducted engineering tests and tested picture quality against the toughest metric - visual perception.
- **Manufacturing / Deployment** – Engaged and trained factory personnel in manufacturing setup and pre-production product runs. Performed extensive testing to ensure acceptable picture quality in varying system conditions including conducting pilot engagements with cable operators in live transmission environments.

TEXAS INSTRUMENTS, Dallas, TX**Electrical Design Engineer** (1983 – 1990)***Defense Systems Electronics***

Provided technical support to defense system programs including circuit design, system troubleshooting, worst case analysis and design verification.

- **Design** – Antenna beam steering hardware for a receiver – RF down conversion and analog baseband signal correlation processing.

Missile guidance electronics – analog rate/position sensing and control hardware.

Airborne radar detection and locator system – control logic and temperature compensated gain control in RF modules.

- **Manufacturing Support** – Worked with manufacturing teams to assemble and test hardware during pre-production. Technical interface with 3rd party vendor for assembly of an analog hybrid module.
- **Design Analysis / Verification** – Performed Worst Case Analysis circuit simulations to verify hardware designs and to identify and correct potential problems prior to production.

PROFESSIONAL CAPABILITIES ADDENDUM**Electronic Design Automation**

Software Installation	Environment Setup	Cadence Virtuoso	Analog / RF Simulation
Licensing	Tool / Tech Setup	Cadence Encounter	Analog Design Env
Linux / Unix Admin	OpenAccess DB	IC 6.1.X / IC 5.1.41	Spectre / Spectre RF
Shell Scripting	OA Migration	TechDB Config	Spice
Perl	Data Management	PDK / Techfile	VerilogA
SKILL	DesignSync	Pcell / Connectivity	Virtuoso Layout
LEF / DEF	Stream / GDSII	CAD Methodology	Platform Interoperability

Customer Support / Sales Engagement

Call Center Support	Presales Support	Pilot Projects	Engagement Plan
Onsite Support	Assessments	Partner Programs	Sales / Field Training
Post Sales Support	Value Propositions	Beta Programs	Solution Development
Customer Training	Product Demos	Implementation	Solution Proliferation
Customer Advocate	Issue Tracking	Issue Resolution	Process Improvement

Training and Development

Instructional Design	Technical Writing	Classroom ILT	Presentation Dev
ADDIE	Content Development	Remote Training	Preso Delivery
Adult Learning	Knowledge Mgmt	Webinars	Public Speaking
Needs Assessment	Subject Matter Expert	Technical Training	Web Development

Hardware Design Engineering

Analog	Defense Systems	RF XMTR / RCVR	CATV
RF	Analog Baseband	RF Temp Comp	Set Top Converters
Digital	Electronic Guidance	Gain Control	Head End Video Proc
Video	Power Supplies	Hybrid Modules	Analog Video Encrypt
Worst Case Analysis	Ctrl Loop Analysis	PCB Layout	Manufacturing Startup

Productivity Toolbox

Windows XP / 7	Microsoft Office 2007	MS Visio 2007	MS LiveMeeting
Redhat Linux RHEL	MS PowerPoint 2007	Adobe Dreamweaver	SpaceCruiser
CentOS Linux	MS Word 2007	Photoshop Elements	Intraspect / Sharepoint
Unix	MS Excel 2007	Apache Server	Eclipse
Twiki	VMware Workstation	VirtualBox	VNC

Global Reach

Experienced in culturally diverse environments having engaged with clients, colleagues, and partners worldwide – North America, Asia-Pacific, EMEA.