

Ehren T. Achee

1214 Magnum, New Braunfels, TX 78132

Ph: 512/426-8255, eachee@gmail.com

Summary

I am a motivated, energetic executive leader and engineer searching for a position of influence and technical challenge. Through active involvement with engineering & administrative staff and clear direction of short term objectives and long term vision, I lead by example with my team. With knowledge of many engineering disciplines, effective leadership, and direct communication, I consistently garner the respect of the organization allowing me to lead in a highly effective manner.

Keywords

Multi-Disciplined, Engineering Management, Electrical Engineering, Mechanical Engineering, Software Engineering, System Engineering, Executive Leadership, Manufacturing, NPI

Professional Experience

Design Systems International LLC (Owner)

August, 2014 to Present

Product engineering and design consultation services company formed to leverage my ability to generate equity. Pursuing my passion of multi-disciplined engineering design.

- Successful design, and production contract for thermal head controller for AMD worldwide.
- Design, demonstration, and production contract for thermal test vehicle for AMD worldwide.
- Successful design, test, and product design acceptance of commercial laser rangefinder for SilencerCo, LLC, lead to acquisition by SilencerCo.

SecuraShot LLC

April, 2017 to Present

SecuraShot was introducing a highly integrated and capable body camera that included long-range low-speed communications, gimble stabilized video, intra-device communications and other highly advanced features integrated.

CTO

Major Accomplishments

- Developed team and product concept for inaugural product design.
- Designed, fabricated, and validated all functional components of integrated body camera in 2 mo.
- Managed highly skilled team through funding crisis and maintained morale and cohesion

SilencerCo Weapons Research *1-Pager: Radius Rangefinder* April, 2015 to Nov. 2016

SWR is a new technology division created through the acquisition of DSI to make commercial electronics that catering to outdoor sports. (www.beyondhuman.com)

Vice President of SilencerCo Weapons Research (SWR)

Major Accomplishments

- Setup and launch of new division (including team, facility, roadmap, budget, and culture.
- 14 month development cycle from concept to production start with \$2.5MM revenue in first 6 months of sales.

TrackingPoint *1-Pager: TrackingPoint PGF*

October, 2011 to August, 2014

TrackingPoint was a start-up company in Austin, TX developing the world's first Precision Guided Firearm (PGF), a digital rifle scope integrated onto a rifle that allows untrained users to make highly accurate shots at targets up to 1200 yards.

Vice President of Operations (Sept, 2013 to August, 2014)

Major Accomplishments

- Managed recovery of failing manufacturing & operations organization
- Managed flagship product "Cradle-to-Grave" from prototype to production
- Increased production rates 3x within first two months
- Developed and implemented quality and production metrics
- 16.7 points of margin improvement to high-volume product

VP of Product Design, Director of Integration (Oct, 2011-Sept, 2013)

Major Accomplishments

- 10 Patent Applications
- 8-Month first product development schedule
- 7-Month second product development schedule
- Developed manufacturing processes, supplier pipeline, and test requirements

Precision-Guided Digital Rifle Scope Product Design Leadership

Responsible for all Mechanical, Electrical, and Optical Engineering personnel; Product Integration (Systems Engineering), Test, and Prototype Machine Shop.

Remington Firearms Partnership Project Manager

30MM contract with Remington Firearms; responsible for design, acceptance and product launch.

Centaur Technology (VIA Technologies)

May, 1999 to October, 2011

Centaur is a 100-person engineering subsidiary of VIA Technologies in Taiwan designing x86 microprocessors used in low-power computers running Windows, Linux, or any other x86 O/S.

VP of Manufacturing, Product, and Test Engineering (May, 2006-Oct, 2011)

Major Accomplishments

- Continuous yield improvement and cost reductions year-on-year
- Released 10 x86 CPU microprocessors to market in 12 years
- Identified root cause for cache failures saving >\$20MM
- Developed 20KW burn-in test system, saving >>\$25MM
- Developed 80KW burn-in test system, saving >\$5MM
- Trans-national manufacturing and test operations management / synchronization

Leader of Manufacturing, Product, & Test Engineering (MPE) Division

The MPE division develops the hardware, test programs, and procedures to support over 1MM units per month production of highly integrated x86 microprocessors.

Architect and Development of Custom Test Equipment

Developer of new test equipment for burn-in and system test, designing custom highly integrated tools more capable than commercially available options, saving the company in excess of \$30M.

1 Pagers: Aquarius & Sahara Burnin Systems

Analysis and Resolution of Cache Failures in Sub-Micron CPU Process

Identifying need, collected data and wrote custom software to analyze >15% yield loss issue leading to root cause identification and >\$20M savings.

1-Pager: Cache Bitmap Analysis Software

Taiwan Liaison

Undertook 6-month assignment in Taiwan to coordinate the US and Taiwan engineering groups.

Reedholm Instruments

November, 1996 to May, 1999

Reedholm is a capital equipment manufacturer of parametric test equipment primarily for semiconductor fabrication companies.

Member of Technical Staff

Major Accomplishments

- Manager of Fabless Semiconductor Association (FSA) WLR Test chip Project
- Provided tutorials and training on parametric test applications at conferences
- Chairperson on IRW workshop leadership committee

AMD

May, 1992 to November, 1996

AMD is a multi-national company designing highly integrated products including x86 microprocessors.

Senior Quality & Reliability Engineer (QRE)

Major Accomplishments

- Managed tier-1 customer lines-down communique and recovery plans
- Setup, installed, and qualified local reliability lab to support Fab-25 bring-up
- First engineer installed as 'virtually integrated' QRE to product line

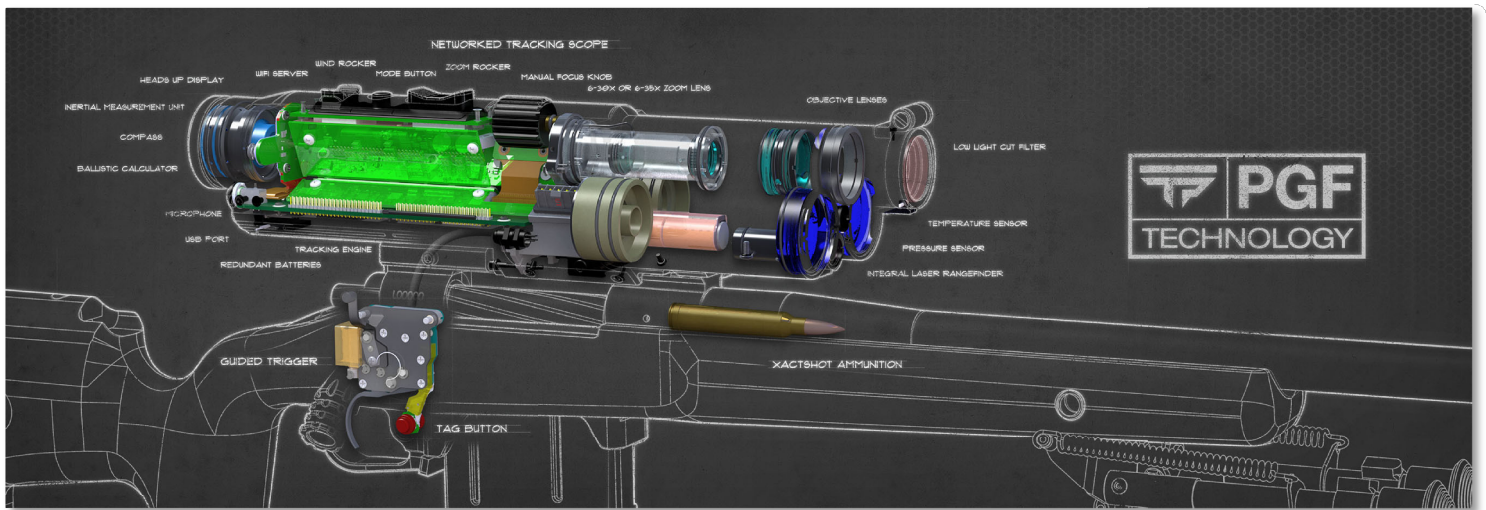
Education

BSEE, Louisiana State University

Specializing in Semiconductor Design & Nuclear Engineering

TrackingPoint Precision Guided Firearm

- Director of Integration (Year 1)
 - Coordinate EE, ME, Software, Prototype Resources
 - Setup validation/test infrastructure
 - Perform all field testing, functional testing
- VP of Product Design (Year 2)
 - Manage EE, ME, Optical, Test and Prototype Departments
 - Remington 2020 Project Management
 - Compliance, final validation testing
 - Production manufacturing release and transfer
- VP of Operations (Year 3)
 - Take over lagging/failing production group
 - 3X increase in production capacity
 - Setup MRP, ERP, QA, and Customer Service



Radius Rangefinder

- Contracted to develop conceptual idea for SilencerCo
- Designed and prototyped as independent contractor
 - Custom PCB design
 - FPGA firmware development
 - Mechanical (die cast + machined) design
- Design approval after only 9 months
- Setup of new division and manufacturing operations (SWR)
- Volume manufacturing on hard tools after 14 months (5 months after design approval)



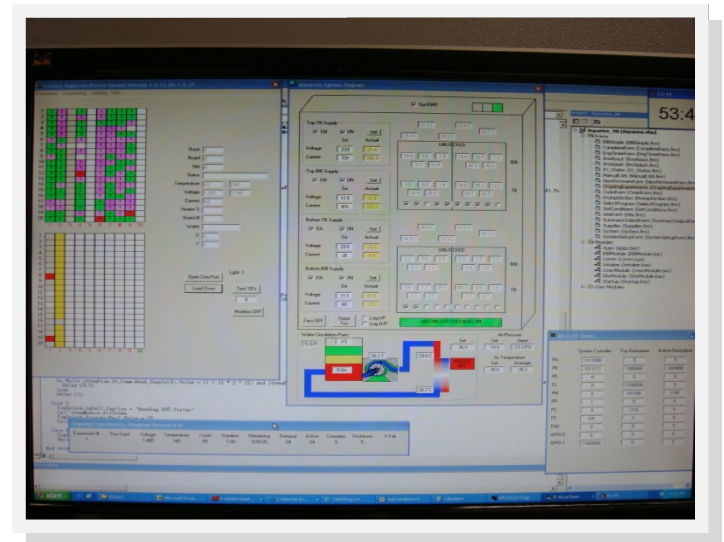
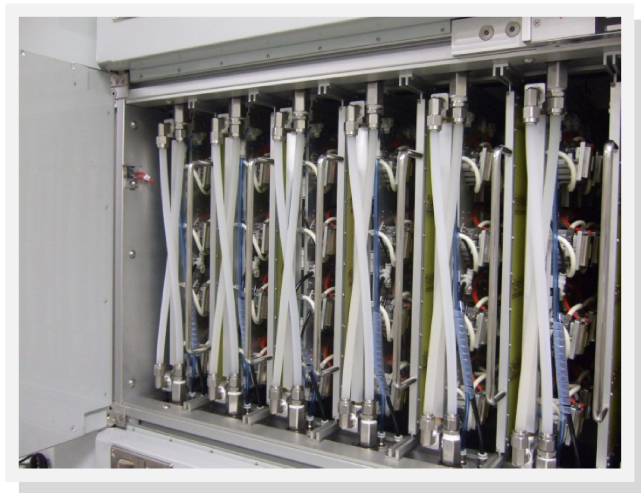
Aquarius Burnin Test System

Cost: \$250K, Retail: \$1.5M+
Design Time: 18 months
Tech Specs: 400 Devices, 150W/device

Independent Device Control (V, Temp, Vector)

80,000 Watt Total Power

Self-contained, Water Cooled

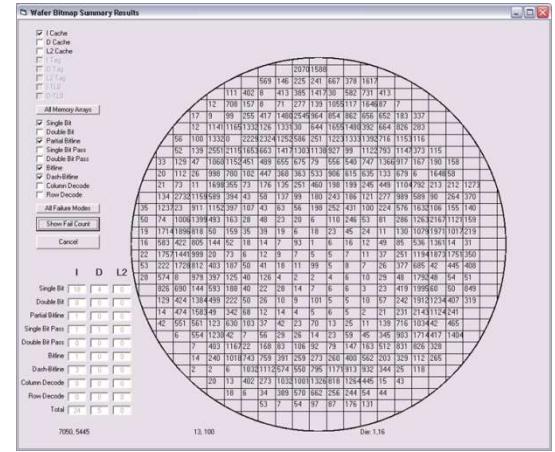
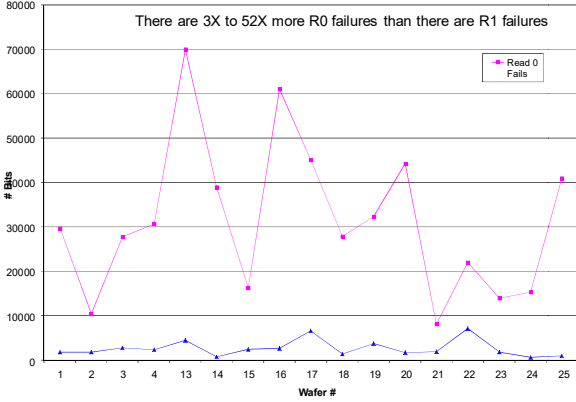


Personal Contribution:

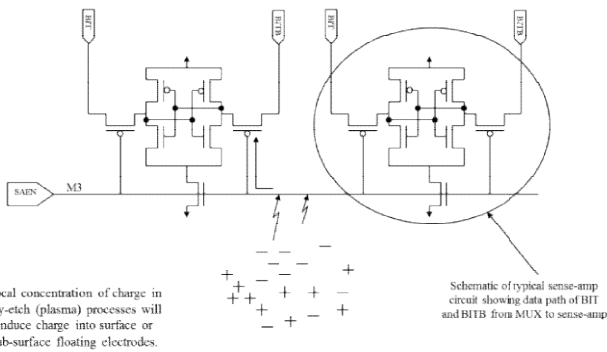
Design Concept
System Design (Cooling, Power, Communications, Industrial)
Mechanical Design
PCB Schematic Design
Software Control
Fabrication & Installation

Cache Failures in 90nm CPU

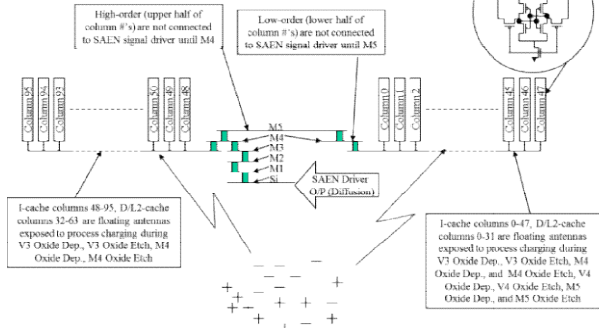
CSXL G39760 Read 0 Fails vs Read 1 Fails Comparison
0.925V Data, All caches, Nominal sense timing



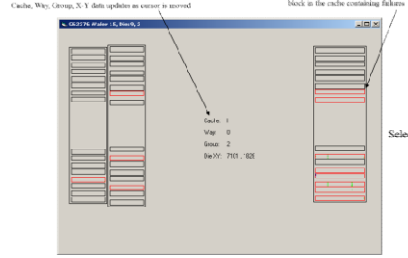
Schematic of Device & Damage



Process Charging to SAEN



Die View



Bitmap Plotting Control Window

Select Cache(s)

Select color-coding (if desired)

Last Click to draw Wafer map of failures

Select Failure Mod(s)

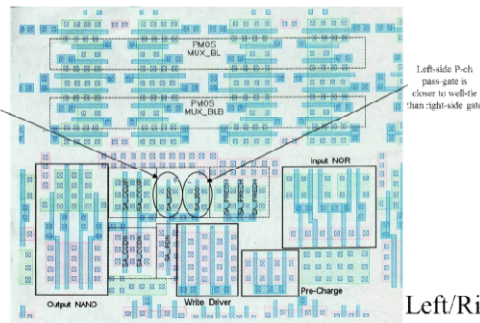
Column and Bit Statistics Windows

Each bit failure is represented by a colored circle

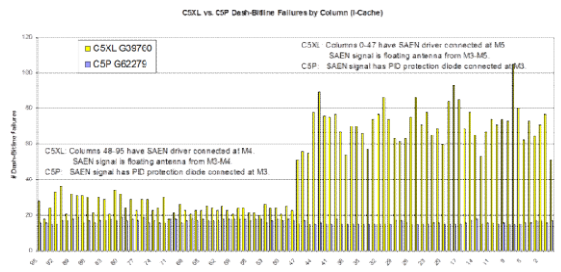
Clicking on a bit will open the 'Bit Statistics' window showing all details about that failure

Bitline, Wordline, and Bit X,Y are updated as the cursor is moved

Layout of Device



Left/Right Column Failures



Personal Contribution:

- Noticed Pattern in Data** uncorrelated to other parameters
- Developed Software** to calculate statistics data for patterns
- Identified Circuit Sensitivity** that could explain failures
- Identified Layout Sensitivity** that further supported theory
- Identified Design Change** that fixed problem, increased yield 15%

Sahara Burnin Test System

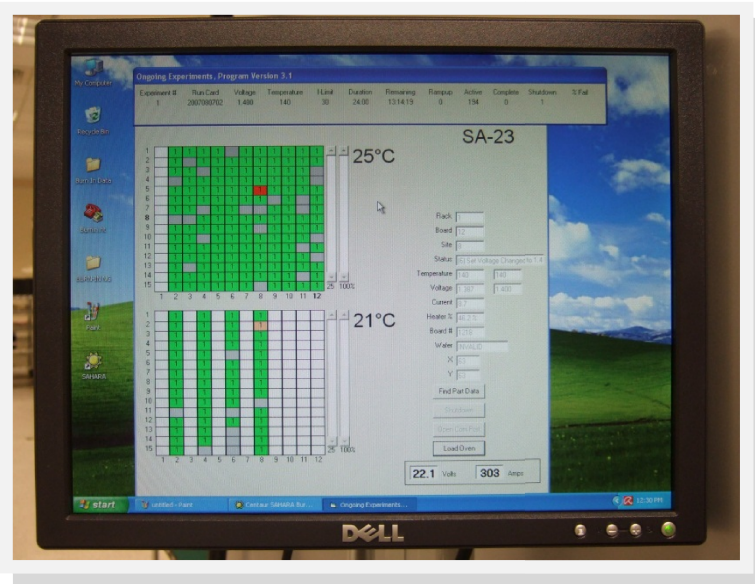
Cost: \$50K, Retail: \$500K

Design Time: 6 months

Tech Specs: 360 Devices, 45W/Device

Independent Device Control (V, Temp, Vector)

20,000 Watt Total Power



Personal Contribution:

Original Design Concept

Proof of Concept Build and Validation

Thermal Design

System Design

Cooling

Power Distribution

Communications

Industrial Design

Mechanical Design

PCB Schematic Design

Software Control

Fabrication & Installation

Subcon Management for Volume

Installed 2005, Continuous use to 2013

