Clayton Lewis Abel

EDUCATION

Abilene Christian University, Bachelor of Science in Engineering *Graduated May 2018*

SUMMARY OF TECHNICAL SKILLS

- **Programming Languages:** Python, Verilog, System Verilog, VHDL, Perl, TCL, 68HC11 assembly language
- **Programs and tools:** Silos, Modelsim, Libero, Spice, TurboCAD, Excel, Teams, CAD, LabVIEW, Multisim, Design Spark, and many different measurement devices
- **Training:** VLSI Verification, UVM Methodology, Trained in ISO 9100, FOD, ESD, Counterfeit part prevention

EXPERIENCE

Tekmos, Austin, TX - *Design and Verification Engineer*, September 2018 - June 2021 (2+ years)

- Served as lead engineer and customer liaison on several major client projects, e.g. Collins Aerospace, Honeywell, and BAE
- Created detailed Verilog test benches for design verification based on customers data sheets
- Performed failure analysis on a chip with an unintentional SCR
- Assisted head project Engineers in RTL design and synthesis of microchips
- Quickly learned new programming languages based on customers' desired final language type, e.g. VHDL for Honeywell
- Reverse engineered designs based on the customers datasheet
- Designed PCB's for long-term and high-temp reliability studies
- Created microchip bonding diagrams
- Created data sheets for each project
- Collaborated with the head of the Quality Department to streamline the design process
- Coordinated with Test Engineers to create reliability tests
- Worked with the Resource Procurement Department to create a custom high temperature ceramic package for a flash design
- Debugged product testing failures and coordinated with third-party manufacturing companies
- Hosted a high-temperature semiconductor exhibit with the Tekmos President at the 2019 IMAPS Hi-TEN conference in Oxford, UK

Tekmos, Austin, TX – *Electrical Technician*, **July** 2011 - September 2018 (7+ years)

- Tested products to ensure proper functionality
- Interpreted electronic schematics and mechanical layouts to diagnose equipment problems
- Designed code using C and Python to create remote thermometers installed in ovens
- Designed component housing using CAD
- Assisted with product inventory
- Assisted lead Design Engineers with multiple projects
- Verified microchip reliability based on datasheet specs
- Used logic analyzer to reverse engineer read, program, and verify sequences for a NXP microchip
- Designed circuit boards using Design Spark
- Simulated designs using LabVIEW and System Verilog

Abilene Christian University, Abilene TX – *Senior Engineering Capstone Project*, 2017 - 2018

- Researched, developed, and presented a specialized drone to assess and measure powerline utilities for Milsoft Utility Solutions
- Selected product components, created a Bill of Materials, and made a budget for component and design expenses
- Coordinated with a 6-member team to develop and test the power line drone, as well as accommodate client product specifications, performance, and quality needs

INTERPERSONAL SKILLS

- Earned the Eagle Scout award in 2013 by demonstrating values of perseverance, discipline, motivation, leadership, accountability, and achievement. Designed, budgeted, procured materials and labor, and constructed a musical playground for the city of Sunset Valley for the Eagle Scout Service Project
- Attended several leadership and teamwork workshops to earn the rank of Senior Patrol Leader, the highest leadership position in the troop, responsible for leading meetings, planning troop activities and service projects, delegating responsibilities, and appointing troop leadership