



Company Overview and Intentions for Mexico Office

Agenda

- Introduction
- Services
- Customers
- Design Verification
- Intentions for Mexico Office

Dr. Michael George Bartley



Mike Bartley
Founder and CEO

Dr. Mike Bartley has over 30 years of experience in software testing and hardware verification, having built and managed advanced test teams at companies like STMicroelectronics, Infineon, Panasonic, and ClearSpeed. He has also advised organizations such as ARM, NXP, and startups on verification strategies.

A pioneer in applying artificial intelligence (AI), Mike began using genetic algorithms in 1998 and now helps businesses integrate AI to enhance efficiency and customer engagement.

Mike founded a software test and hardware verification services company that grew to 450+ engineers, serving over 50 clients globally. This company was acquired by Tessolve Semiconductors, where Mike is now Senior VP. He focuses on integrating the latest verification and AI techniques in VLSI projects and leads Tessolve's Centres of Excellence, which include AI R&D initiatives.

He holds a **PhD in Mathematics** from Bristol University, along with **nine MScs** in fields such as software engineering, AI, and blockchain. Mike is also studying quantum computing and technology in healthcare. Additionally, he is an active angel investor, having invested in 25+ tech start-ups since 2017, and advises companies on growth and investment strategies.



Dr. Jesus Efrain Gaxiola Sosa



*Mexico Office Expansion
Consultant and U.S. Business
Development Partner*

J. Efraín Gaxiola Sosa was born in Yucatán, Mexico. He currently works as an associate engineer on the technical staff at Silicon Labs, leading the development of infrastructure and automated testing to support the new generation of “Systems on Chip” for Internet of Things (IoT) applications.

Before this, Efraín held various technical leadership roles at Silicon Labs, focusing on automotive TV and radio tuners. During his graduate studies, he worked for Texas Instruments and Biotronik, specializing in design and systems.

In 2012, he was awarded the State Youth Prize by the State of Yucatán in the Academia category. He has published articles in various peer-reviewed journals, is a contributor on the yearly Technical Symposium at Silicon Labs, where has received the best paper award in several occasion and is the primary author of a patent in automotive applications.



He received a PhD in Electrical Engineering from Texas A&M University and a Bachelor's degree in Electronic Engineering with a focus on Telecommunications from the Instituto Tecnológico de Mérida, where he was recognized as Distinguished Engineer in June 2024.

About Alpinum Consulting



Alpinum Consulting launched in June 2016 with a clear focus to help companies succeed in their Digital Transformation by providing the talent, strategic guidance and innovative technology solutions, while making that transformation simple and cost effective. Over the years, with the rapid rise in the use of AI for both productivity gains and new service/product opportunities, Alpinum has adapted to incorporate this into our services too.

Alpinum Consulting was set-up by Mike Bartley who successfully started T&VS in 2008 to provide software testing and hardware verification solutions, grew it to become a global solution provider with clients ranging from Tier 1 semiconductor companies to smart start-ups, and then successfully sold it to Tessolve Semiconductors in 2020.

Over the years clients have leveraged the experience, quality and cost-effectiveness of Alpinum Consulting services to deliver a number of AI, Cloud, Agile and DevOps development projects. Alpinum Consulting is now expanding to open new global offices to multiple continents to better serve our clients with nearby to nearshore resources.

<https://alpinumconsulting.com/aboutus/>

Design Verification:

- Supporting clients in IP and SoC verification projects
- Verification planning, resourcing and improvements

Other services:

- Strategic advice
 - Successful Adoption of AI and Improvement of Organizational Design Verification Capabilities
 - Investment advice to both: investors and start-up companies
- Industry activities
 - Verification Leaders forums in USA and UK; Regional growth strategies
 - Encouraging students into semiconductor industry and Chairing industry professional bodies



Alpinum Training

find out more about our online, self-paced training classes



Alpinum Events

see a list of the events that we organise



Alpinum Consulting

consulting services (e.g. board and strategic advice, support to grow your business)

<https://alpinumconsulting.com/>

Customers

- TechWorks (<https://www.techworks.org.uk/>)
 - Running networking events
 - Trends in Semiconductor System Design
 - <https://www.eventbrite.co.uk/e/trends-in-semiconductor-system-design-tickets-1012891655207>
 - <https://alpinumconsulting.com/fpga-front-runner/>
 - “BreakThrough” technologies in collaboration with IMEC
 - Helping to develop the semiconductor industry in the UK
 - <https://www.techworks.org.uk/semiconductor-leadership-group>
 - UK Verification Leaders Forum
- Training company
 - Board level strategic advice
- New EDA company
 - advice on how to expand into a new geography

What is Design Verification?

- A systematic process that ensures a design meets its specifications and design guidelines
 - Uses mathematical methods to convincingly argue that a system is free of defects
 - Aims to prove that implementation is a refinement of the specification, and to be exhaustive and complete
- Key part of DESIGN, the first step in the semiconductor supply chain
- North American Semiconductor Companies
 - Not enough engineers to meet demand of Design Verification services
 - Key opportunity for nearshoring

Intentions for Mexico Office

- To establish an office that will provide Semiconductor Design Verification services for customers based in North America.
 - It will be a private limited company under Mexican laws, a subsidiary of Alpinum Consulting UK, but a separate legal entity. It will have a separate balance sheet and P&L. It will report annually following local regulations.
- **Vision:**

Alpinum Mexico provides World Class Nearshore Semiconductor Services primarily focused on Design Verification, Emulation, RTL, Design for test (DFT) , and Physical Design, for companies based in North America. Future services will include Analog/Digital/Mixed-Signal/RF Design, and IC Layout engineering.
- The project is expected to start in 2025.



Thank You!