GV & ASSOCIATES INC.
Your Electronic Design, Integration and Fabrication Partner
Specializing in High Performance Applications and Products
23540 Oriente Way
Ramona, CA 92065

GV & Associates, Inc. Company and Founder Profile

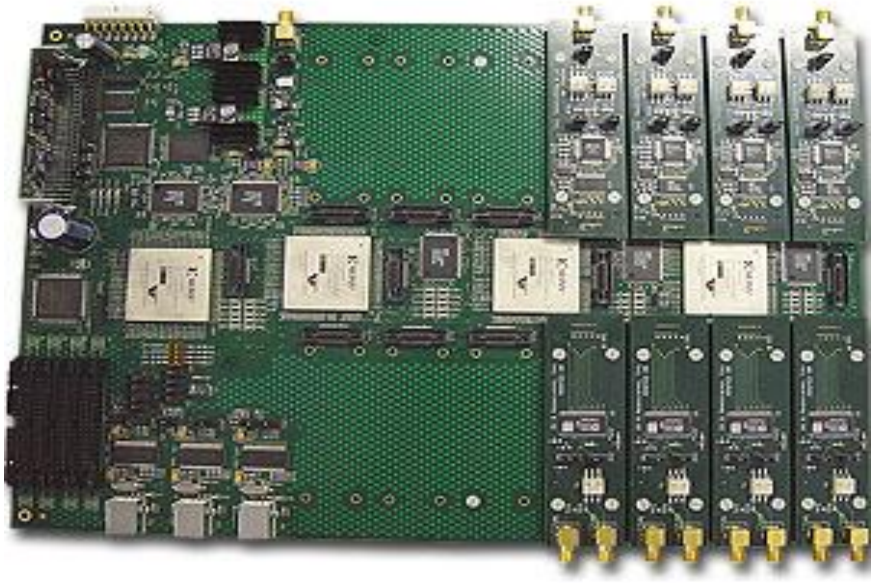
GV & Associates, Inc. (GVA) has a 16-year history of design, integration and fabrication of leading edge processing engines for military, commercial, and educational applications. GVA has developed and marketed a broad range Commercial Off the Shelf (COTS) products which have be used by companies such as Lockheed Martin, JPL, US Air Force Research Lab, Qualcomm, and L3 Com to integrate complex Digital Signal Processing (DSP) applications.

GVA has worked with companies such as Cubic Defenses Systems to develop state of the art VHF and UHF exciters and receivers which are deployed in the US military.

GVA has completed numerous custom designs for many companies such as those mentioned above which incorporated high speed Analog to Digital Converters (ADC), Digital to Analog Converts (DAC), Local Area Networks (LAN), Fiber Optic interfaces, Double Data Rate Memory (DDR), USB interfaces, and other customer-specific interfaces.

GVA realizes that miniaturization and higher integration plays a large role in the exercise of relevant technology. GVA continues to expand its capability to support such efforts by continuing to update our technology and expanding our relationships with innovative companies such as Xilinx, Inc.

An example of one of our products is shown below. Additional information may be found on our web site (www.gvaconsultants.com).



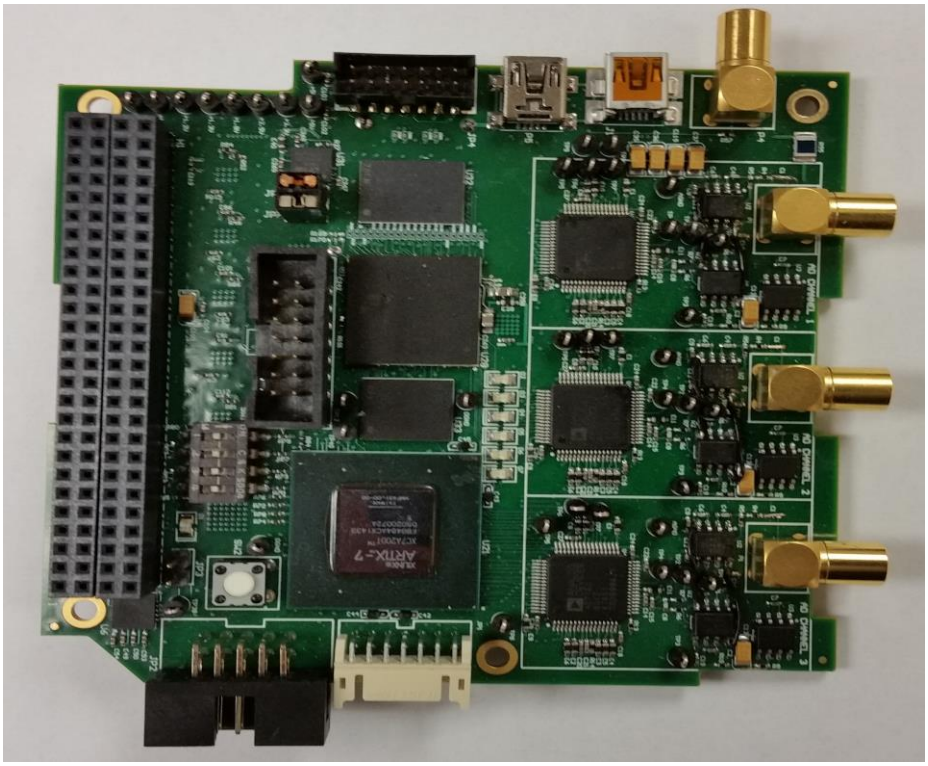
GVA-395 Hardware Development Platform

Mr. Vanderloop is the founder and driving force behind GV & Associates, Inc. He has been responsible for the design, fabrication, manufacturing and marketing for all products and services. He has managed numerous design projects over his 20+ year career and has built a solid business based on customer satisfaction.

Facilities / Equipment

GV & Associates has a 640 sq foot development laboratory with all necessary test and development equipment.

GV & Associates has access to all required software and development tools to implement FPGA design and layout. Additionally, GV&A has the uses the Altium design for the design and layout for a development PCB for a proof of concept.



CubeSAT DSP Processor Platform

Gerard Vanderloop

President / Consultant - GV & Associates, Inc. - From 7/92.

Responsibilities and Results

- FPGA Design and Integration
- High Speed Digital PCB Design and Fabrication
- Product Development and Integration
- System Test and Integration
- Overall Project Management

Responsible for large FPGA design, integration and testing for various commercial and military applications. Functions as the president of an engineering consulting and light manufacturing company. Responsible for the contract negotiation and business development in the area Digital Signal Processing (DSP) for use in highly integrated digital HF & VHF receiver, exciters, and modems. Managed and organized a multiple disciple engineering team. Designs and markets a product line of DSP Hardware Development Platforms based on Xilinx FPGA technology. Has designed and fabricated numerous high speed digital PCBs. Has held a TS/SCI clearance.

Senior Electronic Design Engineer - General Instruments - From 2/90 till 7/92.

Responsibilities and Results

- Complex Digital Design.
- Integration of large design into Application Specific Integrated Circuits (ASIC).

Designed and integrated a Reed-Solomon Decoder into an ASIC which performed error-correction on a received serial data stream. Incorporated a Deinterleaver into the Reed-Solomon Decoder to increase the burst error correction capability. Performed fault grading and system testing to insure high production reliability.

Senior Electronic Design Engineer - Action Instruments - From 8/88 till 2/90.

Responsibilities and Results

- Digital Design with analog instrumentation interfaces.
- Design of Microcontrollers.

Completed a 3-Phase Power Monitor Design, which allows the end user to monitor a 3-Phase power source for over-current or over-voltage, phase voltage, phase current, power factor and total power consummation.

Electronic Design Engineer - Cubic Defense Systems - 8/85 till 8/88.

Responsibilities and Results

- Digital Design.
- Integration of large digital design into ASIC.
- Design of Microcontrollers.

Completed and managed of an Independent Research and Development (IRAD) program which implemented the digital redesign and size reduction of existing, troublesome analog circuits into an ASIC for use in the Tactical Aircrew Training System (TACTS). Designed a microcontroller for use in the integration of a NSA-approved encryption device into a Cubic airborne system.

Education

BS in Electronic Engineering - California Polytechnic State University, San Luis Obispo - June 1985.