



Electronic Design Services

ITS design capabilities include FPGA, ASIC, Microprocessor based, MIPS, and Digital and Analog design. We offer Chip, Module/Card or complete System/Subsystem design.

We also provide Firmware design, Logic Simulation and Verification, and Timing Analysis as well as a variety of Testing Services. Our overall mission is to continue to grow and produce results for our customers in the fields of Design, Test, and Simulation.

Amongst a variety of other expertise, our engineers have experience in the fields of Telecommunication, Embedded systems, and Digital Video Delivery systems.

We can partner at any stage in the design cycle and would be happy to have a white board session with your engineers to discuss your needs. For more details of our services, please refer to the back of this brochure.

Firm Fixed Price Contracts ITS can provide a Firm Fixed Price Contract to our customers. A Firm Fixed Price Contract gives our customers the advantage of having a known cost to complete their project rather than the open-ended hourly rate that individual contractors work under.

Established Customer Base Building close relationships and repeat business has been the key to our success. ITS have provided a variety of testing services for the following customers.

Raytheon, Lockheed-Martin, ITT, Teradyne, Flextronics Test, Boeing, US Navy, US Air Force

Founded in 1989 Our main office is in East Longmeadow, Massachusetts and consists of 5000 square feet of laboratories and office space. Our design engineers average over 16 years design.

Architecture:

Requirements documentation
Design partitioning
Interface requirements
Memory schemes
3rd party core analysis
ASIC/FPGA technology choices
Design for testability
Write design specifications
Write test and qualification plans
Analyze module/system performance

ASIC/FPGA Design:

Architecture and technology planning
Behavioral and structural logic simulations
Code coverage
Timing requirements
Post routing timing verification
Thermal analysis
Clock tree analysis
Power analysis

Design Verification:

Bus models
Behavioral and structural models
Custom transactors and testbenches
Regression testing
Static verification
Random verification
Code coverage
Testability analysis
Verification reporting

Module Design:

Module level Architecture
FPGA/ASIC partitioning
Module level behavioral and structural simulations
Placement and Layout, Module debug
Software/Firmware integration
Network protocols – ATM, SONET, Ethernet
Software and driver design using C, Assembly code
Network protocols – ATM, SONET, Ethernet
Bus designs with PCI, VME, Turbo Channel, Utopia, MIPS, Motorola
Develop custom software debug tools with C, PERL
Unix, Scripting

CAE Tools:

FPGA design with Altera (MAX-PLUS and Quartus), Xilinx Alliance
Verilog simulation with Synopsys VCS and Virsim, Cadence, Modelsim, Silos
Schematic capture with Vanguard, Valid, Orcad, Protel, Viewlogic Viewdraw
Logic synthesis with Exemplar (Galileo and Leonardo), Simplicity
Module layout with Protel, Cadence Allegro

