Imaging Systems Technology

The following is a sampling of projects completed at IST:

- Air Traffic Control Software
- Train Control Software
- Centrifuge Design
- Solar Panel Electronics
- Food Process Control Expert System
- RF Detection and Shielding
- Flat Panel Consulting
- Complete Plasma Panel Electronic Design Package for a Major Display Producer
- Product Teardown and Evaluation
- Litigation Consulting for Flat Screen Display Industry
- World’s First Full Color Flexible Display Using IST Plasma Sphere Technology
- Sonar Sensor to Reduce Blind Spots in Tractor Trailers
- Touch Systems
  - World’s First 42” Touch Screen
  - World’s First 50” Touch Screen
  - World’s First 65” Touch Screen
  - World’s First 85” Touch Screen
  - World’s First 103” Touch Screen
  - 100’s of Custom Touch System Designs Since 1997
- Vector to VGA Signal Convertor
- Conformable Antenna

IST is committed to comply with the ISO Q9001:2008 International Standard to assure the efficient manufacture and delivery of quality products, in a professional and flexible environment, in a timely manner and at a competitive price. Imaging Systems Technology is dedicated to persistently improving our processes to assure our products continue to meet the needs of our customers. IST acts with honesty, integrity, and responsibility in all our business relationships.
Imaging Systems Technology designs and delivers systems based on customer specifications and requirements. We service many industries including military, aerospace, automotive, consumer electronics and flat panel display producers.

Imaging Systems Technology has been delivering cutting edge engineering designs since 1997. We provide electrical and mechanical engineering services, including product design and reverse engineering. We are registered ISO 9001:2008 with Design.

IST is employs many talented Professional Engineers, Scientists, Chemists and Technicians. Our team can provide complete turn-key solutions, or just a little extra manpower to help get your project completed.

Our talented staff can not only help with your engineering needs, but can support all phases of Intellectual Property Development including prior art research, patent artwork, claim identification, and IP protection and portfolio strategy.

**Electronic Design**

Imaging Systems Technology provides custom electronic design completed with the stringent requirements set forth in ISO 9001:2008. This assures that your design is completed to your specifications, and has been fully tested for functionality.

IST’s engineers are fluent in the latest design tools and components, which will ensure your final product is designed to be produced with easily available components. We can also use client specified application software packages and integrate with their existing systems.

**IST Can Assist You With**

- Electronic Design
- Software Development
- PCB Design
- Flat Panel Consulting
- Reverse Engineering
- Touch Systems
- Signal Conversion
- Materials Research
- Much more!

Visit IST Online at: www.teamist.com
IST specializes in flat panel display systems, but we do much more. We are fluent in the industry's standard of micro-processors firmware, PGA, and DSP. We are very experienced with the design of both digital and analog devices. Our team is proficient in sensors, power supplies and noise filtering. We can work with many interfaces including RS-232/422/485, CAN, and USB.

**Software Development**

IST has the expertise to help with your next software project. We offer full software design services – which include help with specifications, requirements, design, verification and validation and documentation.

IST has delivered projects in the following languages:

**High Level**
- C, C++,
- Java, Java Script,
- Visual Basic, BASIC

**Micro Code**
- ATME
- ALTERA
- PIC

IST is proud to have solutions that are currently in use on automotive assembly lines, locomotives, and in air-traffic control test sites.

**PCB Design**

If you have a printed circuit board that you need designed our ISO 9001:2008 with Design registered company can be of assistance.

Our team can design and deliver anything from a single layer board design to more complex multi-layer boards. When complete we will deliver a design package ready to be manufactured.

IST engineers are experienced in the nuances of PCB design. We consider electrical and thermal noise, physical hardships, and design with easily available parts.
Our expertise includes, but is not limited to, waveform design, EMI noise reduction, power requirements, video artifact reduction, and mechanical housing design.

**Reverse Engineering**

Have a product, but have lost the design documents for it? Imaging Systems Technology can take an existing product, tear it down, and then develop the design package you need to rebuild it.

We have worked on product tears downs that were so complex it took 2 years to complete, and have also worked on simple designs that took less than 3 weeks.

Deliverables can include schematics, parts lists and build instructions, or a complete prototype system. As we work, we suggest simple modification that can be made to improve product performance and reduce manufacturing cost or improve the assembly process of the system. IST will also find replacements or redesign for obsolete and hard to find components.

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**Flat Panel Consulting**

Imaging Systems Technology is the premier flat panel display consulting house in the world.

Our customers have included many of the major display manufactures. Typical projects last anywhere from 1 month to 2 years, and have included complete product tear-downs as well as turn-key electronic designs.
Project Spotlight

Sensor Development

IST has been working with the Air Force Research Labs at Wright Patterson Air Force Base to develop sensors that will detect as well as deflect electromagnetic pulses. In order to complete this project, IST acquired the area’s only Anechoic Chamber for EMI wavelength evaluation.

IST is uniquely qualified to assist with EMI projects that require testing and filtering. Let our electrical and material engineers help with your next sensor project.

Touch Systems

Since 1997, IST has been a world leader in touch screen overlays. IST developed the first touch system with over a 42” diagonal for the original commercial plasma displays.

Since then, we have continued to be world leaders in touch system design. Our customers include Sprint PCS, major TV studios including NBC, CBNC, ABC, CBS, Fox, Versus, and NBA TV. Theme parks such as Warner Brothers in Spain, and Walt Disney Studios have incorporated our touch systems in exhibits.

Custom and off the shelf solutions in single or dual touch are available in a reasonable lead time. For more information, please go to the IST touch system web page:

http://www.ISTTouch.com

Signal Convertors

Since the vector monitors used in the 1970’s are no longer available, developing a method to convert vector signals to VGA signals has become a real need. Many fully functional systems are rendered useless because the displays no longer function.

In 2009, IST developed a Vector VGA board that directly takes a vector input and converts it to a VGA ready signal, for use with virtually any off the shelf monitor. Although this was initially designed for the arcade industry, IST has worked with other companies to keep
How IST Can Assist You:

Imaging Systems Technology provides electronic development and consulting with expertise in display, imaging and optical technologies. Additionally, IST is proficient in embedded micro control, signal capture and analysis.

legacy systems working. One example was an aviation company in Haughton Michigan. IST helped to develop a solution which allowed them to keep their legacy air traffic control test systems operational.

For more information on our vector VGA convertor technology, please see our web page:

http://www.VectorVGA.com

Materials Research

Although we are competent in electronic design and fabrication, IST has on staff material scientist and engineers to help with your next project.

Our experience has shown that most solutions have a material aspect to it that is as critical to the final solution as the hardware and software design. We are one of the few design teams in the area that offer both material solutions as well as electrical and mechanical solutions.

Our knowledgeable design team can:

- Perform a Complete Electronics System Design
- Execute Control System Modeling and Algorithm Development
- Develop or Update Embedded Software
- Develop or Update Electronic Hardware
- Assist with Product Qualification Testing
- Support in Developing System Specifications

Call IST to Discuss Your Needs Today!

866-TEAM-IST