SCALABLE, MODULAR, REUSABLE BROADBAND INTERFACE SOLUTIONS FROM VTI

Airborne Radar ■ Wireless Handheld Devices ■ Communications Base Stations
Missile Guidance ■ RF Interface Units (RFIU) ■ Radar Altimeters

VTI Instruments

Ensuring Consumer Confidence in the Quality of Your Product

Critical systems and components, such as those found in airborne radar, missile systems, and communications devices, must perform as expected first time, every time. The primary method of ensuring that these systems perform as expected involves comprehensive functional tests, utilizing automated test equipment (ATE).

Today's manufacturers are trending toward ATE systems based on a "common core" of instrumentation that can be reused corporate-wide, and broadband interface solutions play an integral part in this strategy. This approach not only decreases overall test time but enables faster time to market, and high integrity broadband signal routing is the critical link that can mean the difference between success and failure.

Challenges

Implementing custom RF and microwave signal routing solutions and meeting production schedules can be a daunting task. Minimizing the time to field new test platforms is an imperative for success; furthermore, this must be accomplished while reducing support costs, providing scalability, and ensuring platform reusability.

Adopting a top-level strategy that identifies and prioritizes each of the key objectives should be a primary goal when defining a critical signal routing solution. By integrating a scalable core signal routing subsystem into a common test platform, manufacturers can create a versatile system architecture that provides the lowest overall cost of ownership.

- Meeting faster time to market requirements
- Leveraging expensive RF test assets across multiple test sites through RF switching systems
- Delivering global service and support
- Reducing test system footprint
- Facilitating multi-vendor interoperability
- Maintaining a high degree of confidence in accuracy of test results

VTI INSTRUMENTS – HELPING YOU COMPETE

Broadband Interface and Switching Solutions Customers

- AAI Corporation
- Augusta
- Boeing Satellite
- BAE Systems
- Broadcom
- Harris Corporation
- ITT Avionics
- Lockheed Martin
- Northrop Grumman
- Raytheon Missile Systems

Partial list only.

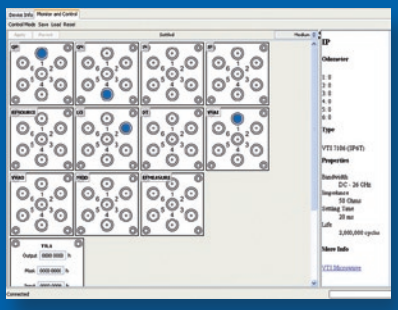
Preserving Capital Investment

An instrument or subsystem that is rendered obsolete drives product support costs and generates a high-degree of pain for the systems engineer responsible for keeping the test system operating. We are committed to protecting our customers from component obsolescence issues and take pride in our track record of delivering solutions that are designed to outlive the products that they are required to test.

Innovative tools, such as VTI's patented Broadband Integrated Design Wizard, enable us to deliver commercial-off-the-shelf (COTS) solutions for custom RF and microwave requirements. This approach leverages the widest selection of commercially available components, from the industry's leading manufactures, thus maximizing flexibility and long term support capabilities.

Additionally, we continue to pioneer the introduction and adoption of industry standard instrumentation platforms. These platforms have a rich history of longevity through technological evolution, while maintaining backward compatibility with earlier revisions.

- Co-founder LXI Consortium
- Strategic Member VXIbus Consortium
- Member, VITA



Minimize Development Time with Intuitive Broadband Integrated Design Wizard

VTI's Broadband Integrated Design Wizard has revolutionized the way RF and microwave interface units are developed, literally reducing design times from months to days. The design wizard steps the user through each phase of the process eliminating uncertainty and doubt. The design wizard automatically creates the bill of materials (BOM), interconnect diagrams for path level programming, wire lists, and custom graphical web-based front panel displays accessible from around the world. Ultimately this means quicker time to market.

Maximize Flexibility with Reusable Broadband Switching Core

Developing solutions based on a scalable, open architecture COTS approach ensures that critical test system investments can be leverage for years to come. Functionality can be updated to match changing requirements, with the confidence that each system is designed and documented for long-term, worldwide support. Our commitment to open software support allows easy integration into the operating system and programming environment of your choice. The dynamic soft front panel reflects the configured components including logical names and signal paths, providing a powerful, time saving tool to monitor operation during software development, debug, and maintenance activities.

Exercise Freedom of Choice with Best-in-Class Component Selection

VTI has established relationships with leading RF and microwave component suppliers to deliver best-in-class selection alternatives. The best-in-class sourcing database is the only knowledge base of its kind in the world, and allows us to adopt a completely agnostic approach to component selection. This approach, coupled with the extensive experience of our engineering staff, allows you to select from an extensive library of industry leading components, download data sheets and compare specifications, gain access to hundreds of technical notes and utilize a wide range of engineering tools.

VTI's Commitment

VTI delivers precision instrumentation for the world's most demanding electronic and mechanical test applications. Our Customer list is comprised of leading Fortune 1000 companies who depend on our instrumentation to support all phases of test, from R&D through production and depot level. Prime contractors and defense organizations worldwide depend on the product performance of VTI Instruments to help them maintain a competitive edge in today's global market and preserve the integrity of their brand.

A sustained focus on innovation and technology enables our Customers to optimize their capital investment through product longevity, while ensuring unmatched measurement integrity and data reliability. VTI serves the aerospace, defense, energy, power generation, automotive and commercial electronics industries.