

PXI Today and Tomorrow – Trends and Applications

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- Lower cost
 - Reduced system cost
 - Lower maintenance / logistics costs
 - System reuse/flexibility
- Reduced size
 - Smaller form factor
 - Higher functional density – more functionality / instrumentation in less space
- Flexibility
 - Test interface options – adaptable for low cost, high mix, or high volume applications
 - Configure systems based on production and application requirements – i.e bench top, production, service / repair



PXI: Downsizing ATE for Depot Maintenance & Repair



**GPIB / Proprietary -
based Solutions
1970's – mid 80's**



**VXI-based Solutions
1980's – 1990's**



**PXI-based Solutions
2000's - present**



➤ **Functional density**



➤ **Performance**



➤ **Footprint**



➤ **Cost**

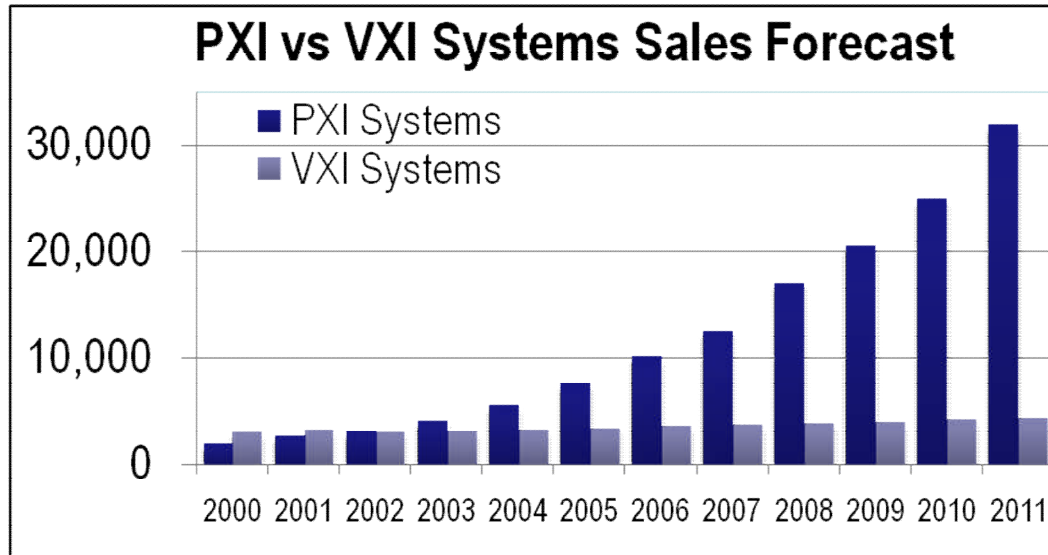


“Enablers” for PXI-based Test

- Breadth of products
 - Over 1500 products
 - cPCI and PMC format products
- Product Technology
 - Digital: 200 MHz, high channel count, low cost
 - RF: 6 GHz support
 - Bus bandwidth: PCI and PCI Express
 - Broad selection of s/w platforms
- Large number of vendors: > 50 vendors

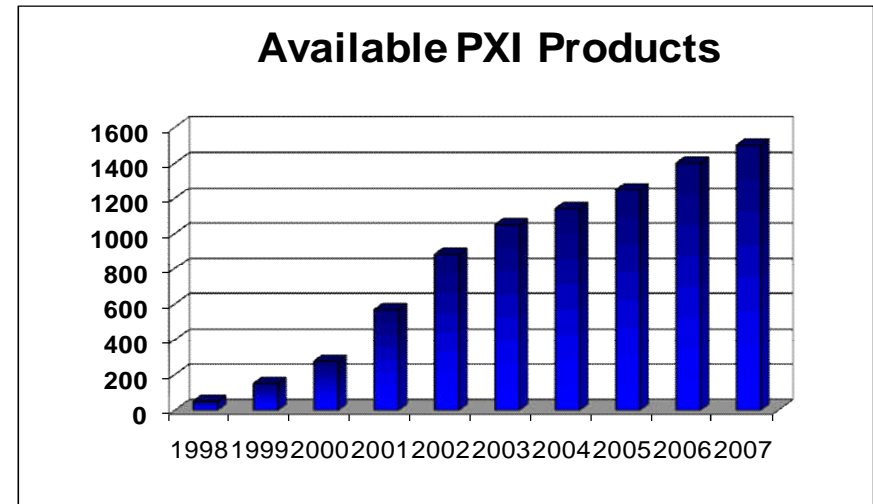


Industry Acceptance of PXI



25% CAGR forecast for 2005 – 2012

Source: *World VXI & PXI Test Equipment Markets, Frost & Sullivan, April 2005*



More than 1,500 PXI Products from 50+ vendors

Source: *PXI Systems Alliance*



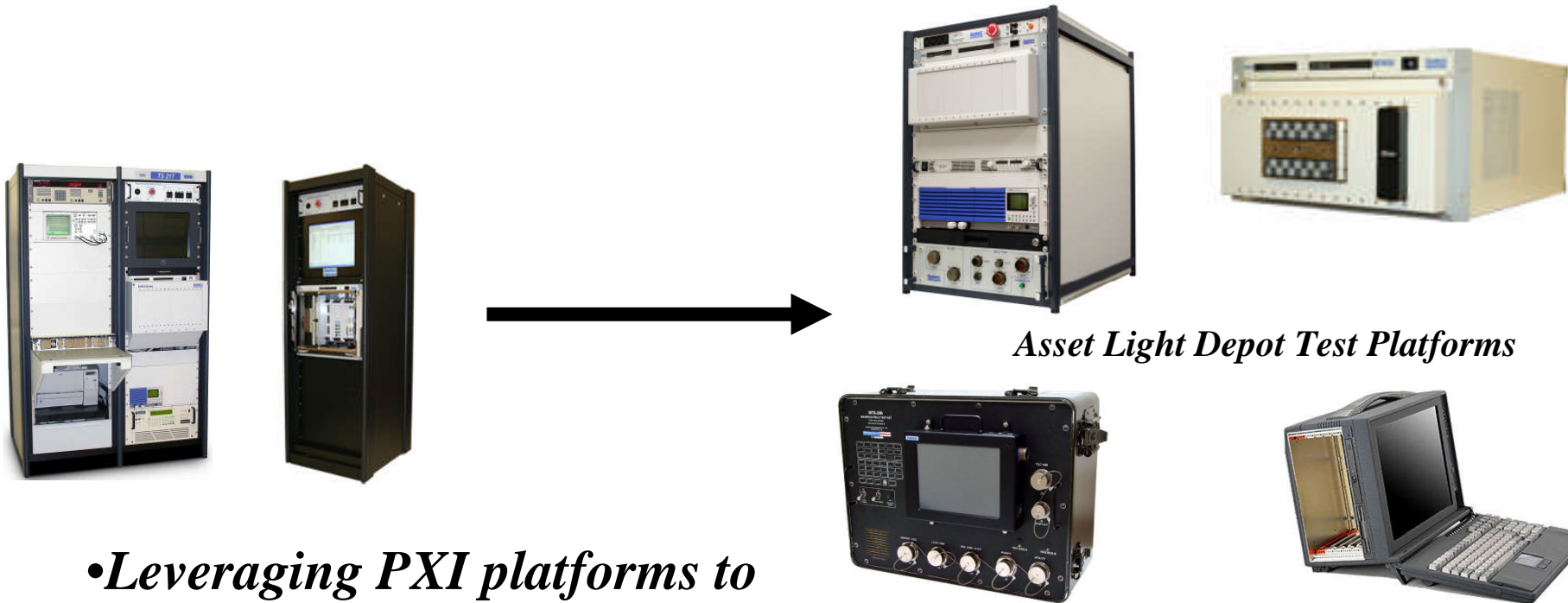
Future Trends for PXI – Depot, O-level and MRO Test Applications



- PXI – based “Asset Light” test systems, systems for “just enough test”
 - PXI deployment for depot, maintenance, repair, and overhaul (MRO) facilities
- PXI – based O-level & flight line test needs
- PXI technology advancements:
 - In - system certification
 - High performance digital test for LRU and component level test



Trends for PXI – Depot, O-level and MRO Test Applications



Asset Light Depot Test Platforms





Flight Line Test Platforms

•Leveraging PXI platforms to bench top, flight line, and O-level platforms

- Common hardware*
- Common software*
- Leverage existing TPS's*



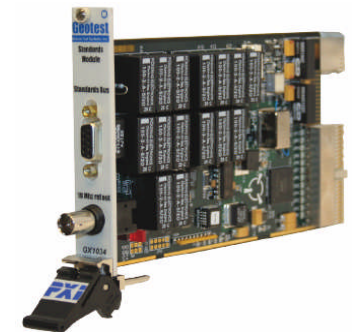
PXI Technology Trend: Digital Instrument Technology

- Price per channel 
- Performance and functionality 
- Functional density (features / sq in) 
- Power / channel 
- Key drivers of these trends
 - PXI and PXI Express platforms
 - FPGA performance and density (replacing digital ASICs) – allows field upgrades / revisions
 - High level of pin electronics integration
 - Semiconductor industry and low cost / high performance semiconductor test suppliers
 - PXI based (Advantest's CertiMAX)
 - Low cost IC testers : \$500 / channel – Nextest
- PXI offers the best price / performance



PXI Technology Trend: In – System Certification

- Deployment and adoption of PXI for depot and flight line test applications demands simplified system re-certification
- In-system re-certification strategy helps mitigate repair / calibration logistics
 - In system standards resource, coupled with a system recertification strategy minimizes down time
- Application based accuracy requirements can help solve the problem of “over – specifying” test system performance



- PXI continues to show robust growth and expansion into both the commercial and military markets
- The PXI platform and product technology can work equally well in both the depot and “asset-light” test applications
- New and future PXI digital instrumentation offers much lower cost (<50% compared to other platforms) for depot & MRO test applications
- In-system verification methodologies can offer simplified logistics and improved system performance / reliability



Thank you!

