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Mass Interconnect and Fixturing Solutions

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Mass InterConnect Solutions

...creating order out of wiring chaos

Advance planning and thorough design consideration can improve the overall test experience with a Mass InterConnect solution for the life of the deployed Automatic Test Equipment (ATE).

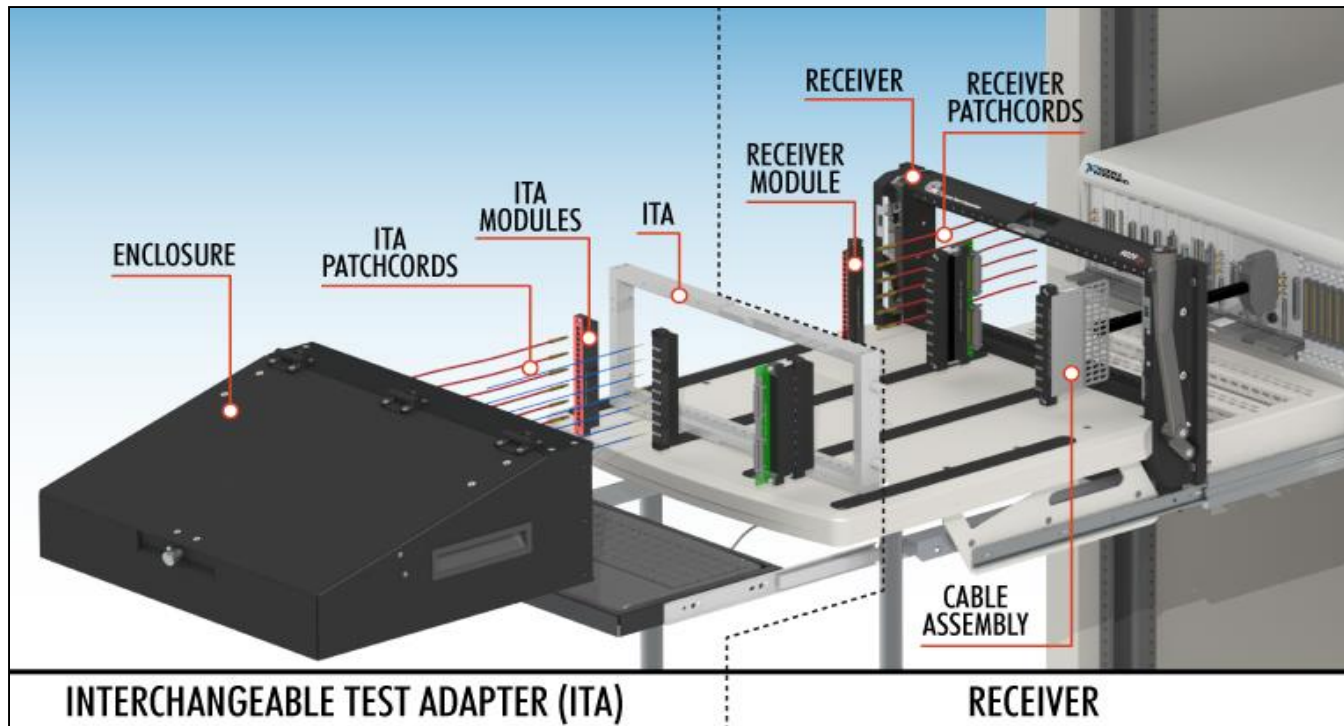
Dedicated to providing solutions for:



What is Mass Interconnect



Mass Interconnect Components



Creating Order Out of Wire Chaos

From Chaos.....



To Order



Why a Mass InterConnect?



- Frequent DUT/UUT Changeover
- Cable Management Issues
- Intense Mating Cycle Requirements
- Pairs Well with Switching
- Connects to Peripheral/Auxiliary Resources



VPC Maximizes ROI for Test Assets



- One-to-Many Test Configuration. A single receiver module configuration can be used to test multiple units under tests



F-35 JSF

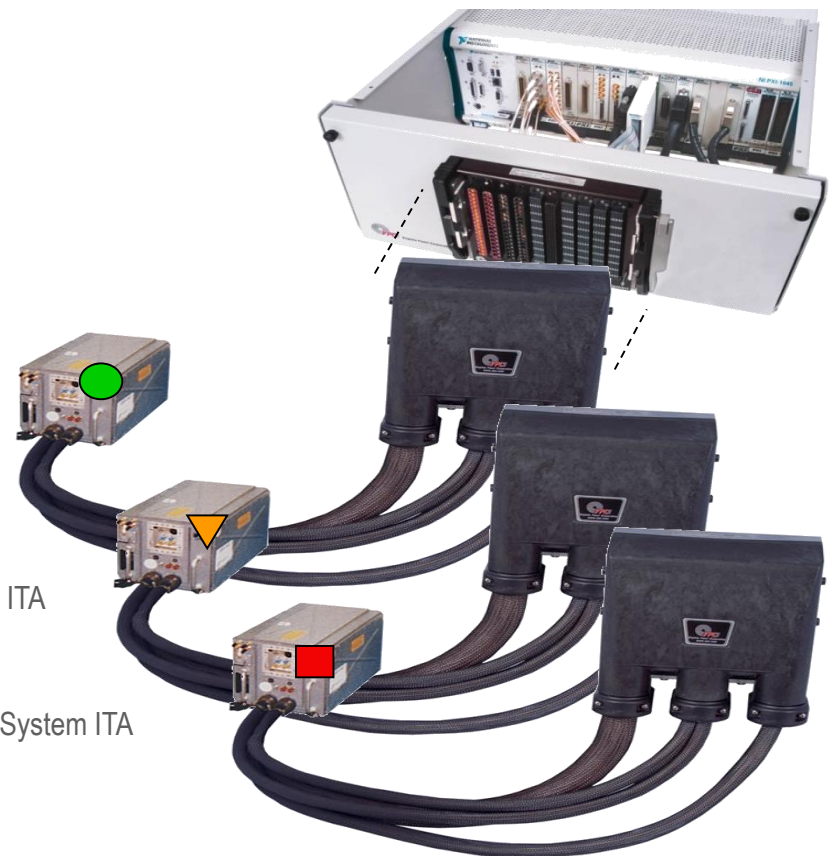
LRUs - Line Replaceable Units



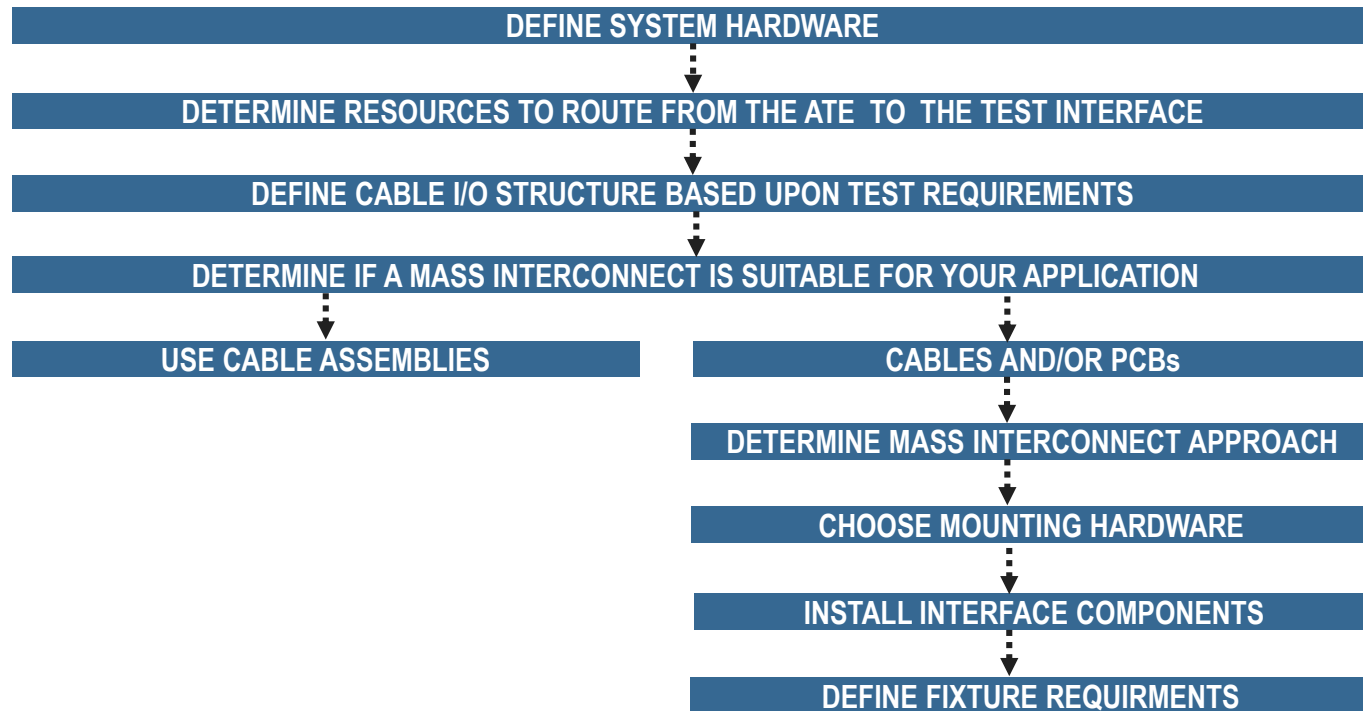
Navigation System ITA

Communication System ITA

Weapons System ITA



Choosing the Right Solution Design



Choosing the Right Solution Design



CHOOSE CONNECTION TYPE

CABLES

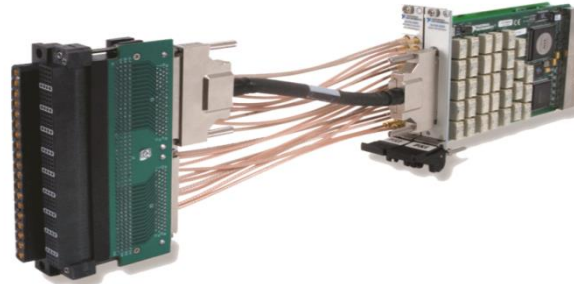
HYBRID

PCB

Cable Solutions



PCB Adapter Solutions



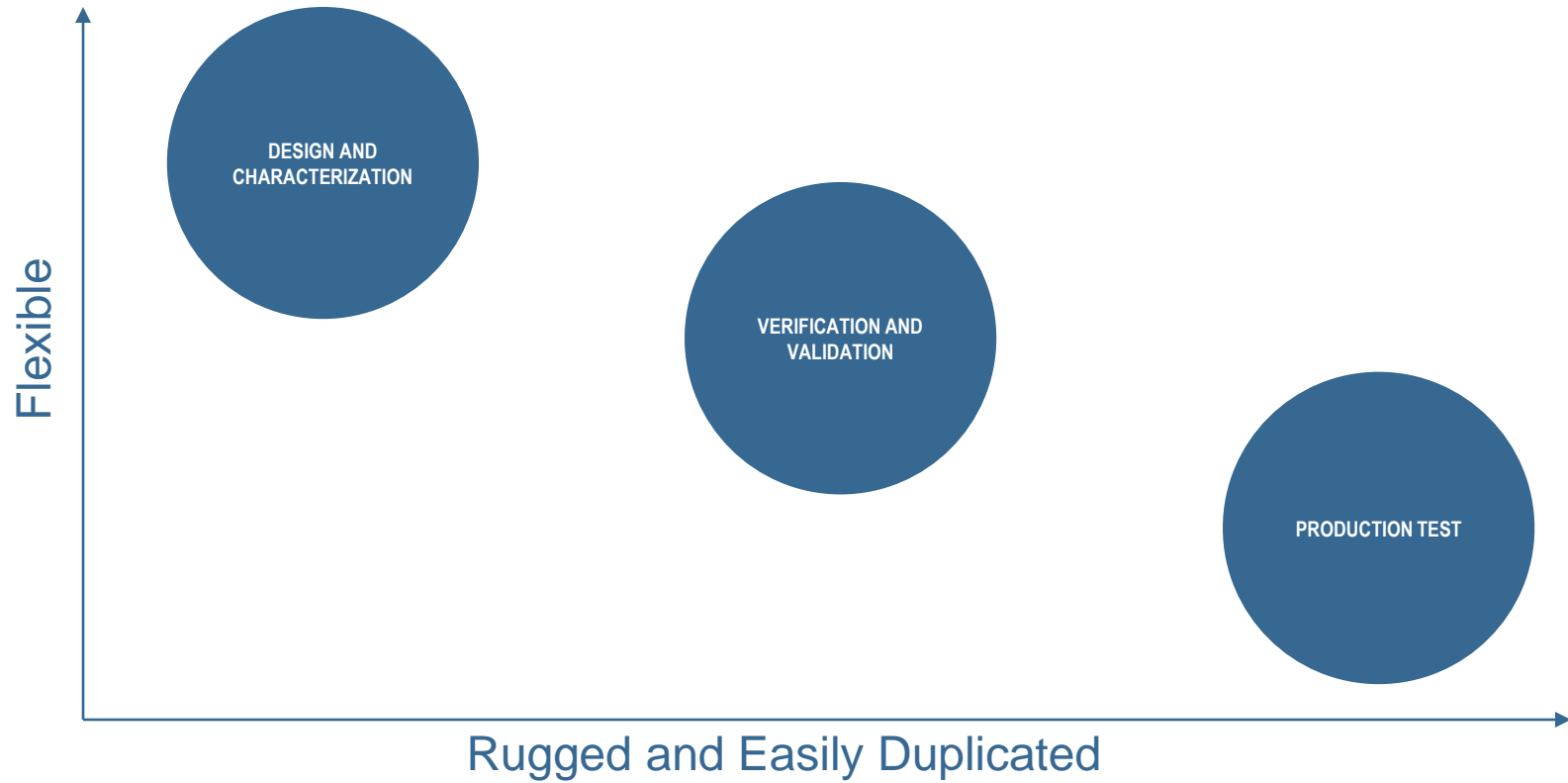
Pull-Thru Adapters

Choosing the Right Solution Design



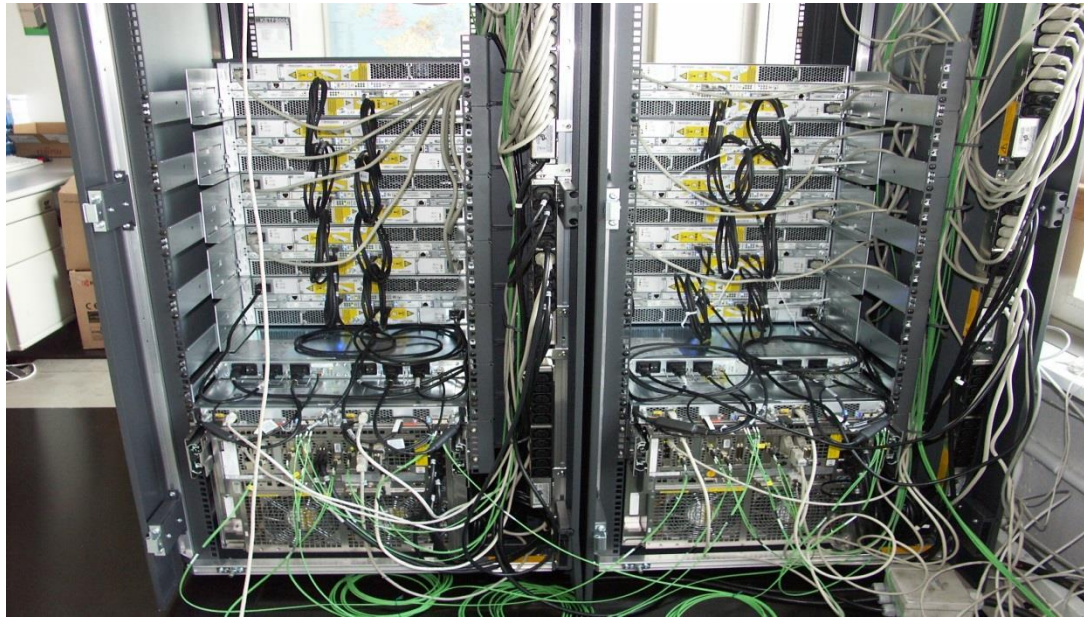
	CABLES	MASS INTERCONNECT WITH CABLES	MASS INTERCONNECT WITH PCBs OR FLEX CIRCUITS
Frequent Changeover Between DUTs	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Optimized for Design and Characterization	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Optimized for Verification and Validation (V&V)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Optimized for Test Production	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Signal Quality	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Continuity of Performance (System to System)	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Ease of System Maintenance and Upgradability	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
System Reconfiguration (vis-à-vis Scalability)	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Ease of Duplication (vis-à-vis Global Deployments)	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Instrument to Module Pin Efficiency	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Repairability in the Field	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Instrument Card Rev. Control Tolerance	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Choosing the Right Solution Design

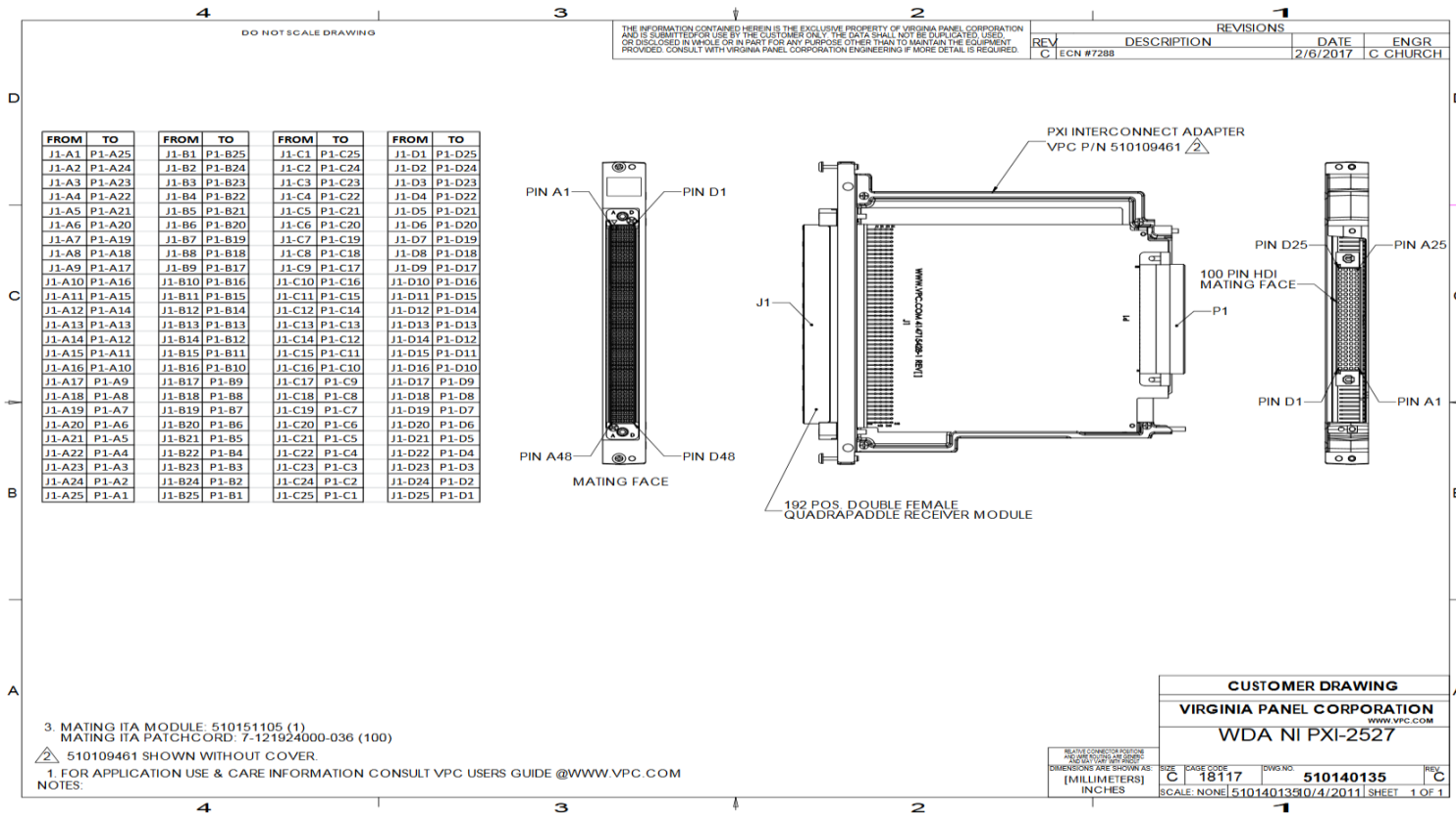


Choosing the Right Solution Design

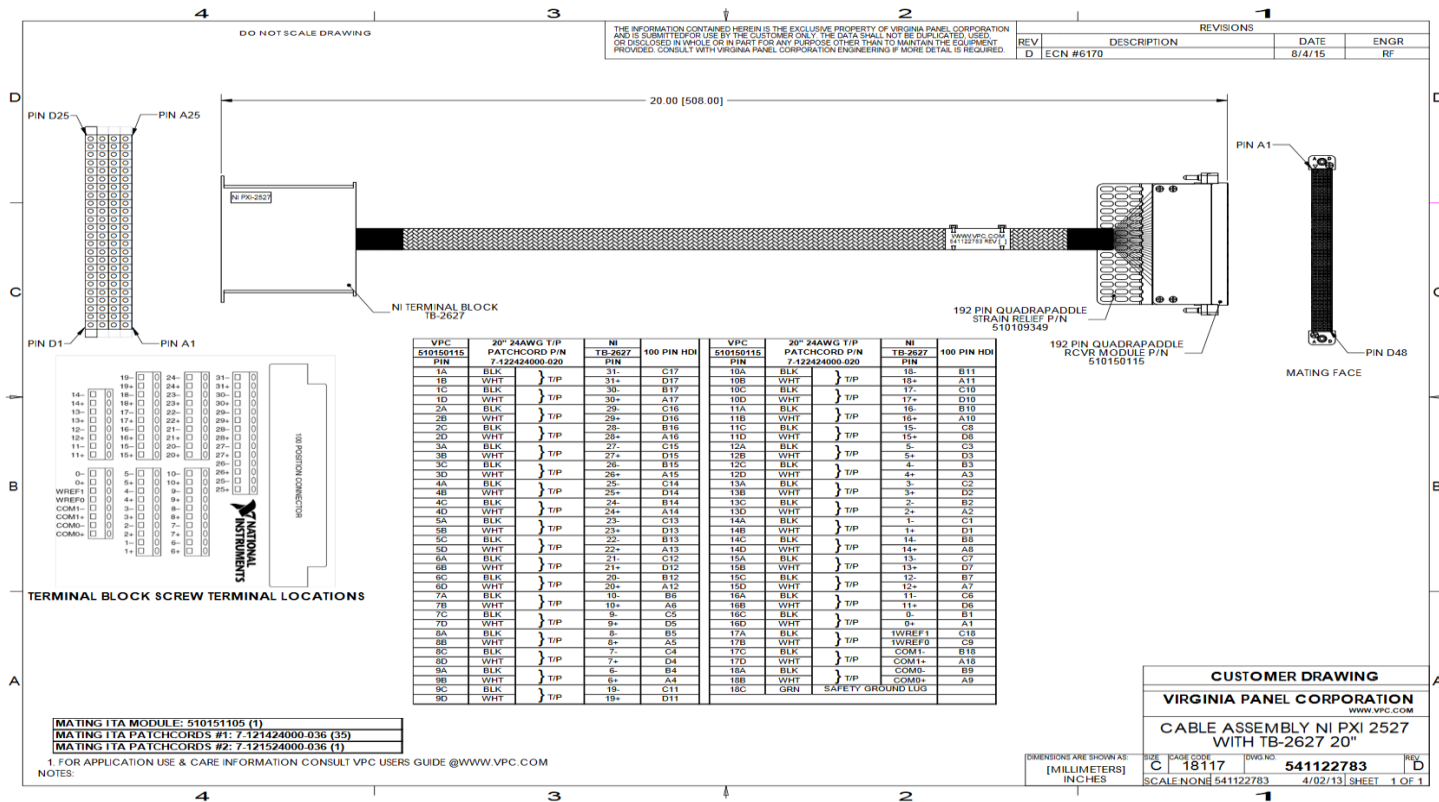
“Help Me Avoid This Test Nightmare”



Sample PCB Solution – NI PXIe-2527



Sample Wired Solution – NI PXIe-2527



Application Examples



Cabled 12 Module Solution with Slide Mount Kit



Application Examples



PCB Direct Connection to Instrument Card



Application Examples



High I/O Example 50 Module Solution



Dedicated PXI Solutions



VPC is a proud member of the PXI System Alliance and partners with more than 25 card companies



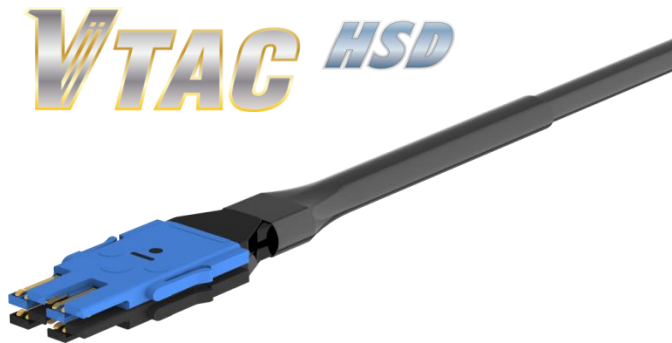
Customers can use our Mass Interconnect products regardless of their PXI module vendor.

New PXIe Tech and Solutions



VPC is continually improving technology and design to keep up with the demands of new high speed digital PXI modules

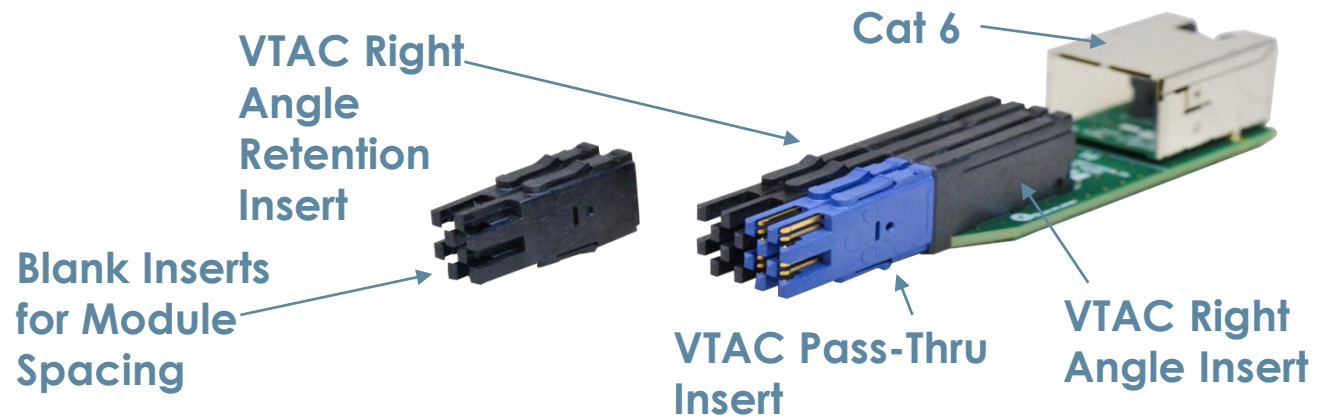
- PXIe-6591 (High Speed Serial Module) – 10.31 Gbits/s
- PXIe-6592 (High Speed Serial Module) – 12.5 Gbits/s
- PXIe-7902 (High Speed Serial FPGA Module) – 12.5 Gbits/s



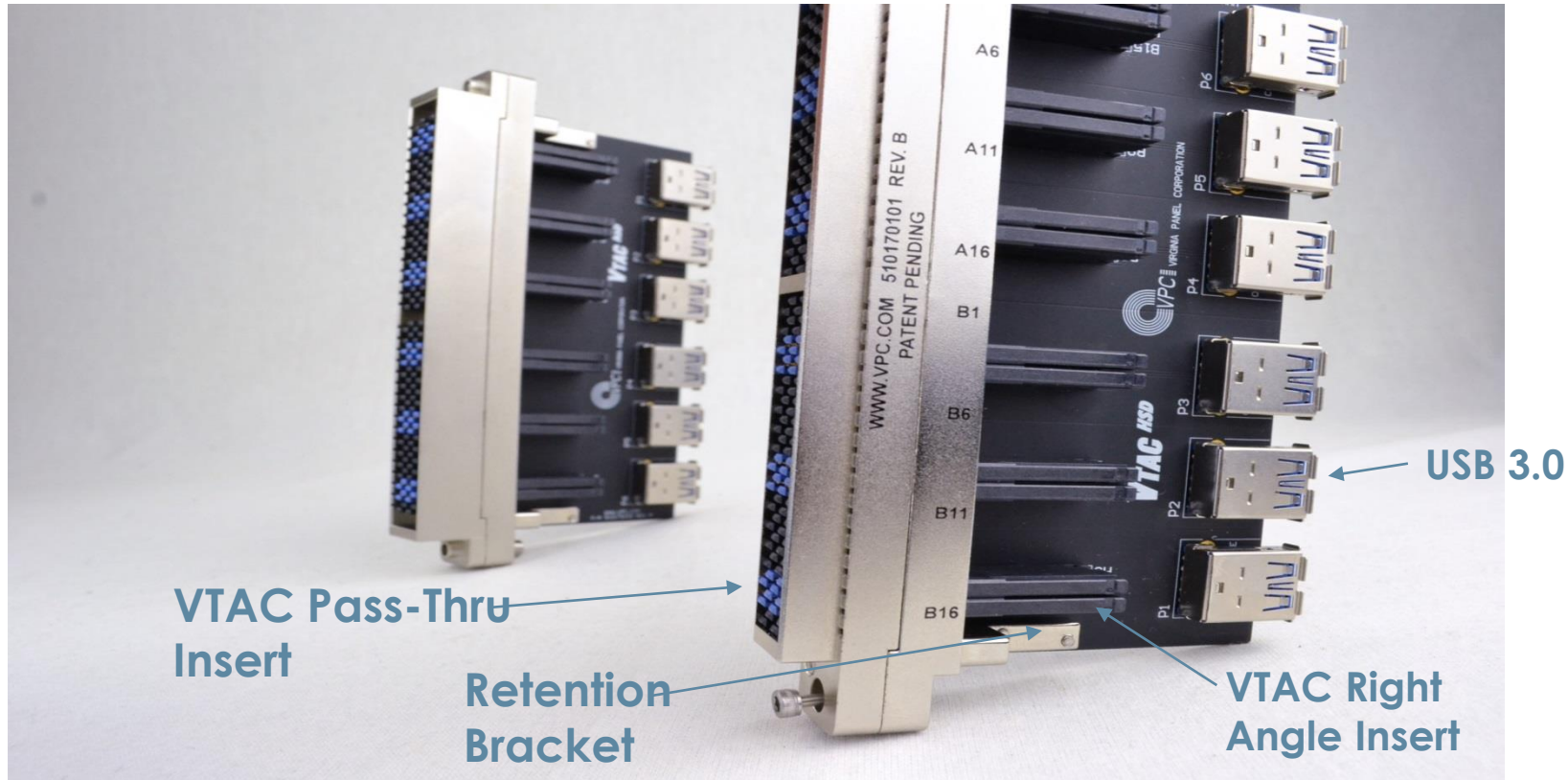
New PXIe Tech and Solutions



- Modular PCB
- Strain-relieved
- Intermixed with patchcords
- Compatible with numerous COTS high speed protocols



New PXIe Tech and Solutions



VTAC Pass-Thru
Insert

Retention
Bracket

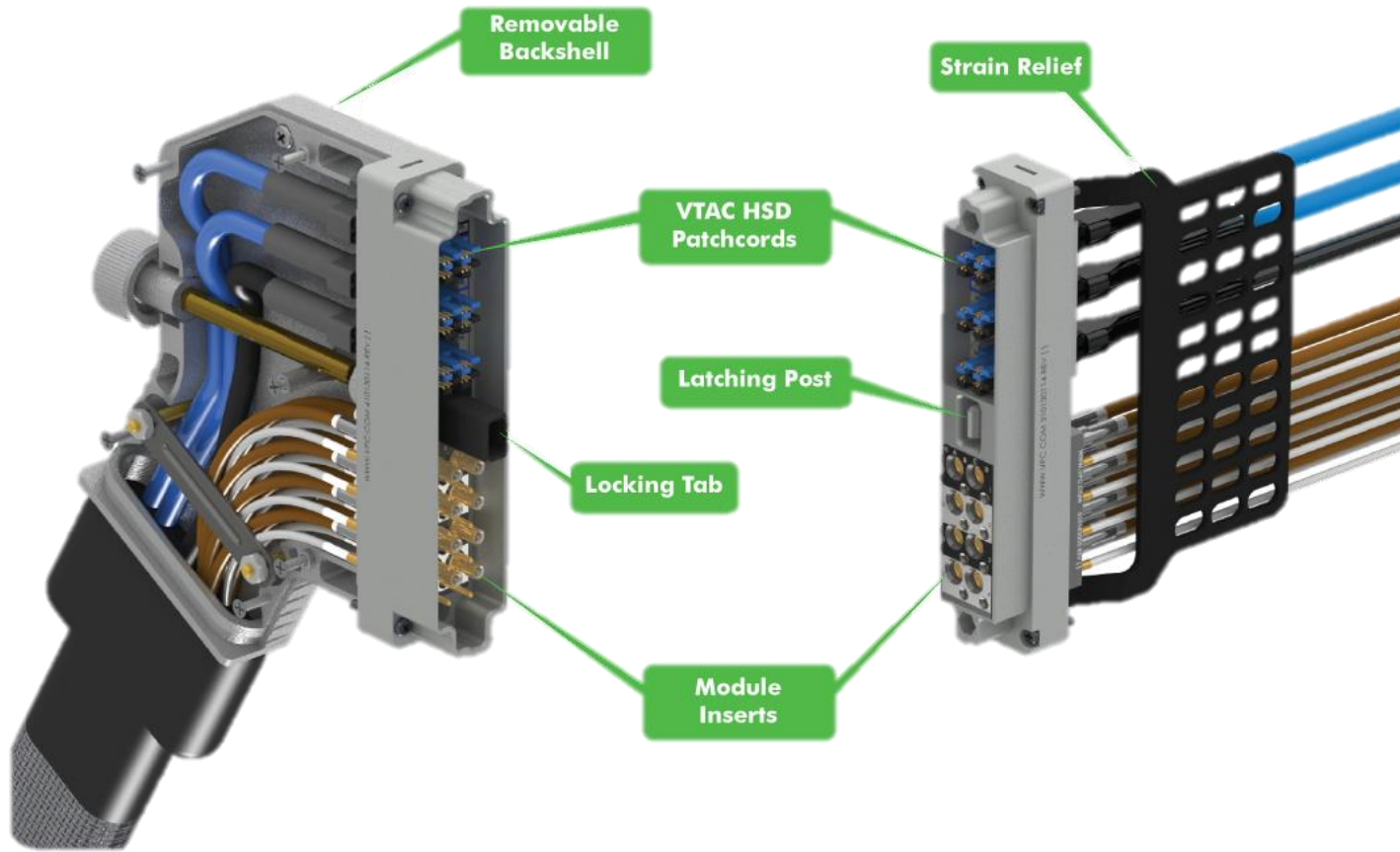
USB 3.0

VTAC Right
Angle Insert



- All Metal Construction
 - EMI Shielding
 - Rugged
- Oblong Cable exit
 - Maximize cable size
 - Braid termination
- Easy access
- Over 10,000 mates





High Powered Solutions



VPC has developed a new **High Power** contact that reaches up to **150 Amps** to meet your high current application requirements.



**HIGH POWER
150 Amps**



High Powered Solutions



- > **Multiple points provide 360° of contact**
- > **150 Amps continuous**
- > **Low insertion force**
- > **10,000 cycles**

VPC's **High Power** contacts are gold-plated for signal integrity and reliability. Using highly flexible Cooner 2 AWG wire, VPC will provide your complete connector solution.

<p>An innovative connector that allows you to connect six High Power contacts at once.</p>	<p>An ideal small connector that allows you to connect four High Power contacts at once.</p>	<p>High Power contacts and patchcords used with iCon and 90 series modules deliver powerful connections for your solutions.</p>	<p>Let VPC engineer your High Power quick InterConnect with our Wire+ Advantage.</p>
<p>iCon ></p>	<p>iI ></p>	<p>Contacts, Patchcords and Modules ></p>	<p>Wire + Advantage ></p>



Let's Continue the Conversation!

Come by our table!

