Applications

The PXI platform offers not only high flexibility and fast test speed,
but powerful software customization capabilities that make it the ideal platform for entering newly emerging application fields.

DATA CENTER | AUTOMOTIVE | TELECOMMUNICATION | SEMICONDUCTOR

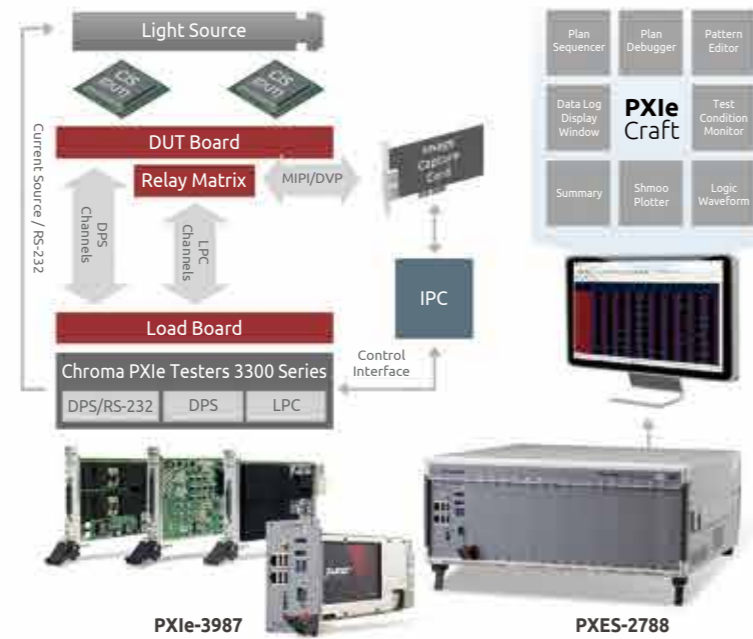## Effective Modernization for Automated Semiconductor Testing

Traditional ATE systems are designed for high-performance testing needs but can be costly due to unnecessary features in large package solutions. The Chroma 3300 system, integrating the ADLINK PXI chassis and controller allows easy reconfiguration for expanding test requirements and uses unified software, saving time and costs.

Customer Benefits

- *18-slot Gen3 PXIe chassis with various modular solutions enhances testing efficiency*
- *Intel® Core™ i7-7820EQ-based PXIe controller provides high performance computing*
- *User-friendly PXIe CRAFT platform accelerates testing, result transfers, and large-scale operations*

Products

- PXES-2788 18-slot Gen3 PXIe chassis
- PXIe-3987 Intel® Core™ i7-7820EQ-based controller
- Chroma 3300 series PXI tester with power supply and relay drive control
- Chroma semiconductor grade CRAFT-PXIe-software

PXIe-3987 | PXES-2788

High-Efficient HIL Testing for Self-driving Controller

Self-driving controllers process sensor data (LiDARs, mmWave radars, cameras) for real-time tasks. Hardware-in-the-Loop (HIL) testing is cost efficient and quicker to develop. Traditional costly HIL setups face synchronization issues. PXI-based HIL systems provide high bandwidth, power, and efficient cooling for high-speed components and I/O ports.

Customer Benefits

- *18-slot PXIe Gen3 chassis provides high density, expandable functional testing*
- *1170W of total power with 82W cooling capacity components and high I/O count testing*
- *11th Gen Intel® Core™ i7 processor enables real-time system, ensuring low-latency response, simulation*

Products

- PXES-2785 18-slot 24GB/s PXIe Gen3 chassis
- PXIe-3987 Intel® Core™ i7-7820EQ Gen3 PXIe Controller
- ADLINK data acquisition and communication modules

Self-driving Controller | DAQ and Communication Modules
PXIe-3988 | PXES-2785
Sensor Actuator
T-Box | GPS and IMU | Drive-by-wire Chassis
Cameras | mmWave radars | ultrasonic radars | LiDARs

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The Best Balance of Functionality, Performance, and Cost

Future-ready PXI Platforms and Modules

intel partner

PXI Systems Alliance

Chroma
Driving Innovation to Success

KEYSIGHT TECHNOLOGIES

Learn More
PXI Solutions

Empower High-Efficiency Testing in EV and LED Manufacturing

Gen3 PXI Solution Optimizes Performance and Cost

The Gen3 PXI platform sets the standard in modular automated test equipment. Its modules, chassis, and controllers offer interoperability. Manufacturers and labs benefit from off-the-shelf, plug-and-play PXI modules for custom testing. The PXI's open architecture provides key features for automated testing including flexibility, affordability, and high performance.

Interoperability
Compatible with standard modular instruments in the T&M industry

High Performance
Based on the latest technology, incorporating powerful multicore processors, FPGAs, and more to speed up time to market

Scalable
PXI architecture synchronizes measurements across modules/chassis for adaptive system expansion

Future-ready PXI Gen3 Platform Highlights

Abundant Bandwidth PCI Express Bus

Electrical Signal Noise Isolation/Reduction

Smart Fan Optimizes Balance of Cooling and Acoustic (Noise Reduction) Performance

Multi-core Virtualization High Performance Computing

Fully Compatible with Standard PXI/PXIe Modular Instruments on the Market

Industrial Leading Cooling Capacity up to 102W

PXES-2788
18/21-Slot High-Power, High-Cooling PXIe Chassis

PXES-2785
18-Slot 24GB/s PXIe Chassis

Electric Vehicle Battery Testing Solution

PXIe-3988
11th Gen Intel Xeon-based PXIe Controller

Chroma 52400 Series
2-ch, High Precision PXI SMU

- Up to 1170W high power and 82W cooling capacity enables high density testing
- Wide range 200nA to 200mA current, 25V to 4mV source and measurement for high flexibility
- Low-noise output for accurate leakage current measurement

Mini/Micro LED Testing Solution

PXIe-3987-TL
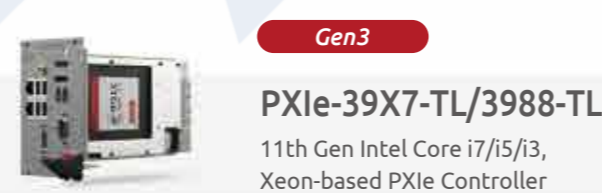11th Gen Intel Core-based PXIe Controller

PXIe-9908
8-ch, Precision PXIe SMU

- 136-ch max high-density enables high-throughput testing
- High accuracy 100nA to 100mA current source and measurement
- Up to 100V voltage measurement range for reverse breakdown voltage (VR) testing
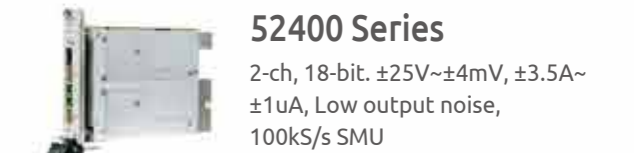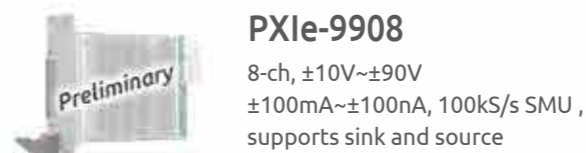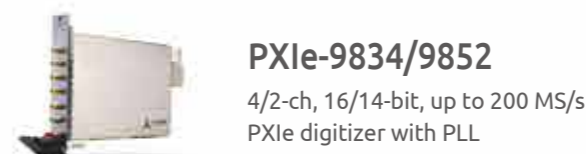

PXI Express Chassis

Gen3
PXES-2788
18/21-slot PXIe Gen3 Chassis with High Power and High Cooling capacity

Gen3
PXES-2785
18-slot 24GB/s PXIe Gen3 chassis

Gen2
PXES-2780/2590/2301
18/9/6-slot 8GB/s PXIe Gen2 Chassis

Thunderbolt
PXES-2314T
Compact 4-slot Thunderbolt™ 3 PXIe Gen3 Chassis

PXI Express Embedded Controller

Gen3
PXIe-39X7-TL/3988-TL
11th Gen Intel Core i7/i5/i3, Xeon-based PXIe Controller

PXIe Remote
PCIe-PXIe-8640
PCIe to PXIe Remote Controller PCIe Gen3, 8GB/s

PXI Express Modules

Source Measurement Unit

Preliminary

PXIe-9908
8-ch, ±10V~±90V ±100mA~±100nA, 100kS/s SMU, supports sink and source

52400 Series
2-ch, 18-bit. ±25V~±4mV, ±3.5A~ ±1uA, Low output noise, 100kS/s SMU

Chroma

High Speed Digitizer

PXIe-9834/9852
4/2-ch, 16/14-bit, up to 200 MS/s PXIe digitizer with PLL

PXIe-9848/9848H
8-ch 14-bit 100 MS/s High-Speed PXIe Digitizer

Multi-function DAQ

PXI-2000 Series
4-ch, 14/16-bit, up to 2MS/s Simultaneous Sampling Multi-Function PXI Modules

PXI-2200 Series
96/64-ch, 12/16-bit, up to 3 MS/s Multi-Function PXI Modules