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CCI 1000 Series ATE Platform with MAC Panel Inc. SCOUT XT Mass Interconnect

Configuration Guide

CCI 1000 Series ATE with MAC Panel Inc. SCOUT XT

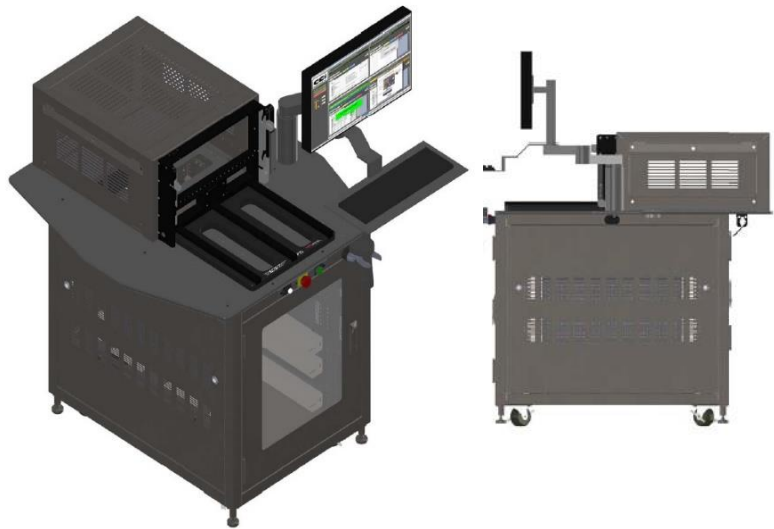
Accurate and repeatable test results are a requirement for production test systems. The Circuit Check Inc. (CCI) CCI-1000 series ATE platform with the Mac Panel Scout XT mass interconnect solves these uncertainties with professional tooling and built-in fixturing.

Overview

- Fully automated functional test and programming
- Topside, bottom, dual or multistage pin probe support
- Through-connector test
- Interchangeable fixturing for scalable tooling
- Capability to test or program multiple products in the same fixture using CCI's unique quick-change product drop-in's
- Multi-up or single DUT fixturing
- Concurrent or single unit test
- Supports >1000 probes
- Scalable footprint
- Dedicated signal paths to support PXI and traditional instrumentation
- Integral UPS
- Color touchscreen with option for integrated bar code scanner

Configurable Fixturing while assuring Signal quality

A key to achieving the maximum value from automated test equipment is using the same test equipment and fixture mechanics to test multiple products. Circuit Check's 1000 Series ATE configured with MAC Panel SCOUT XT mass interconnect achieves this by using modular fixturing mechanics and high-performance instrument interconnect with the shortest possible signal-path wire length. These components enable the same test system to be quickly reconfigured with new tooling for different products, while allowing for the highest possible signal integrity at the lowest investment. This maximizes equipment re-use, while minimizing the cost for each new test.



Scalable Instrumentation for Flexible Measurements

The CCI 1000 Series ATE is configured to customer specific test needs in order to maximize performance at a lower investment, supporting PXI, GPIB, USB, Ethernet and LXI instrumentation.



CCI 1000 Series Application Software

Circuit Check's modular test sequencing software options include CCITest, CIMTest, NI TestStand and a custom CCI based LabVIEW executive allowing for rapid program development and lower costs, while enabling a single program to test multiple product part numbers concurrently and asynchronously.

CCI 1000 with MAC Panel SCOUT XT Application Example

This test platform is based upon the proven CCI-1000 Series ATE, with its 15U 24" wide rack and 19" rack mount equipment insert rails. The tester is floor standing with a unique top-mounted chassis for PXI instrumentation, along with a MAC Panel SCOUT XT interface test adapter (ITA) receiver.

PXI modular instrumentation directly connect through the SCOUT XT mass interconnect to the ITA receiver by way of MAC Panel Inc. Direct Access Connect (DAK) adapters. Traditional GPIB, USB and LXI instrumentation reside in the base area of the system. The widened chassis allows for power conditioning and auxiliary systems to reside in both sides of the base for ease of maintenance and ergonomics.

This architecture allows for heavy ITA fixturing to rest on a solid one-half inch hard coated aluminum top plate. Additionally, the architecture eliminates the many custom cables of typical ATE, through the use of MAC Panel DAK adapters. This improves signal integrity and system build repeatability, while reducing maintenance costs.



Front of ATE



Example cabled ITA fixture



Back of ATE



MAC Panel SCOUT receiver



Sides of the chassis base allow for auxiliary equipment

Specifications and Configuration

Each CCI 1000 Series ATE is assembled to a customer's test application needs, comprising of device-under-test (DUT) measurement instrumentation interconnects, signal types and counts, power sources, and management software.

Measurement Capabilities

Functional Test

- Analog inputs and outputs - static and waveform I/O
- Digital I/O
- >6.5 digit DMM
- Oscilloscopes
- Waveform generators
- Switching
- CAN, SPI, I2C, MOST, custom specific interfaces and communication protocols

RF Test

- PXI and traditional instrumentation to RF frequencies

In-System Programming

- Device-under-test (DUT) site flashing
- Multi-site flashing

Board Handling Automation

- Support for hands-off automated product interfacing

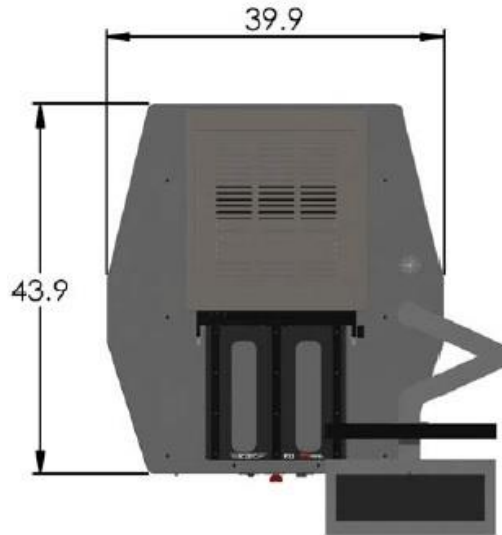
Power Conditioning

- Supply of all necessary voltages
- Emergency shutdown

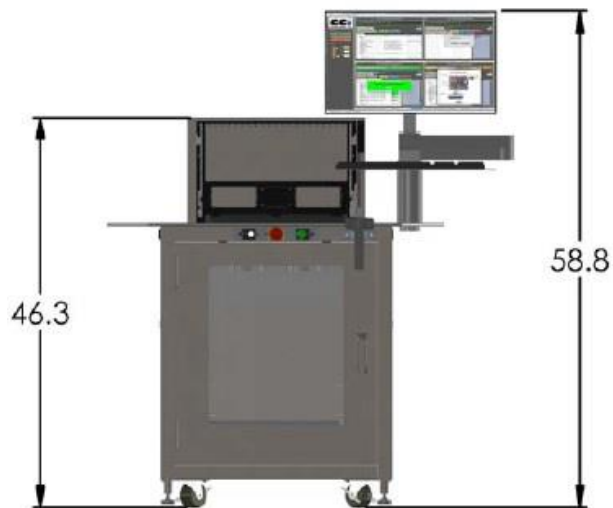
Test and Programming Tools

- NI TestStand®, CCITest, CIMTest, NI LabVIEW®, NI LabWindows/CVI®
- C/C++/C#

Mechanical Specifications



Top View



Front View

Appendix A: Terms and Conditions

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