PCBA Inspection Tech Day
May 15 | Eindhoven

Accelonix

GÖPEL electronics

comet yxlon

Guest Wifi Network:
SSID: dray_guest
PW: WelcomeByAccelonix!

AGENDA

09:45	Welcome	
10:00	**Inspection Xpress**	**First Article Inspection** 100% Visual board Analysis for first-board inspection but also for prototyping, small-series production, and final quality control.
10:35	**Göpel electronics**	**3D AOI for SPI, SMT and THT** 3D AOI inspection of solder paste, components and solder joints. Create new AOI programs in less than ½ hour!
11:20	**Comet Yxlon**	**X-Ray Inspection Technology** 2D, 2.5D and 3D X-Ray technology for inspecting solder joints on top and bottom without any interference.
12:00	Lunch	
12:45	Workshops and Live Demonstrations	

Inspection Xpress Scanner 12:45 – 13:30	Göpel 3D AOI Basic Line 13:30 – 14:30	Yxlon Cheetah X-Ray & CT 14:30 – 15:30

15:30	Closing and Drinks

COMPANY PROFILE

Accelonix
keeping you ahead
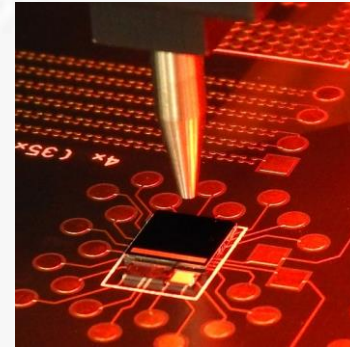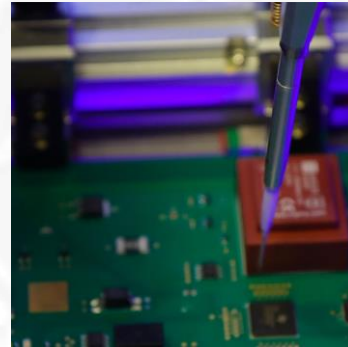
Accelonix delivers innovative solutions to electronics organisations around the world
www.accelonix.nl

ACCELONIX GROUP

Since 1993

Independent European distribution group

Industry leading suppliers and technology

Highly **trained** and **technical** staff providing local and group support

Offices in Benelux, France, UK, Italy, Tunisia and China

70 employees

ACCELONIX BV

Part of Accelonix Group since 2000

Central Eindhoven Airport location in Benelux

10 employees

Experienced service/application engineers

Demonstration, training and application center

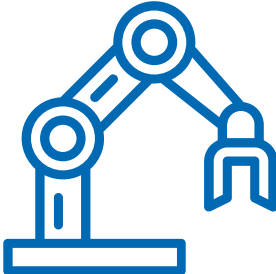**Highly interactive and strong relationships** with customer and equipment manufacturers

Long-term, **excellent equipment support**

OUR CUSTOMERS

Medical

Industry

R & D / Academia

Public
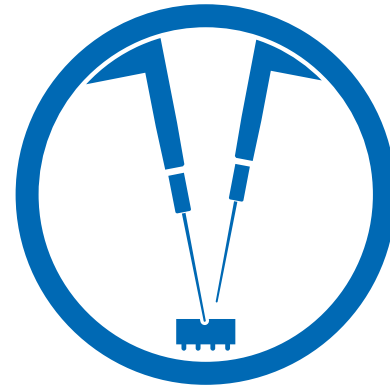
Mil/Aero

Automotive

Transport

ACCELONIX BV

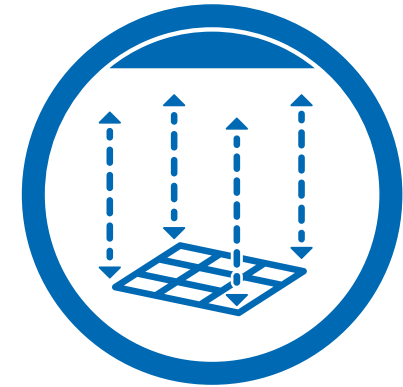Our Solutions

EMC & RF

MICRO & POWER ELECTRONICS ASSEMBLY
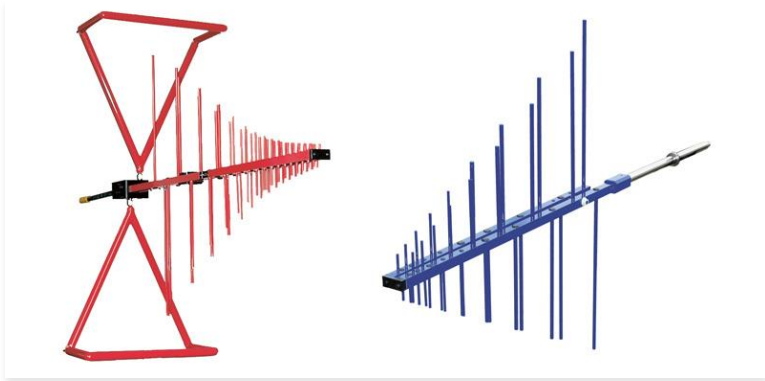
PCBA INSPECTION & TEST
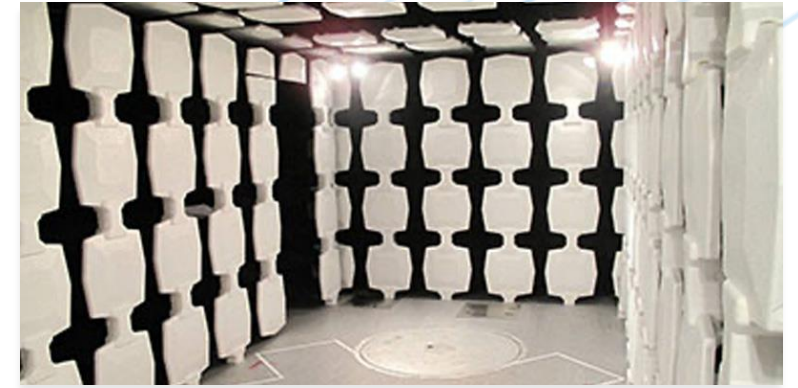
METROLOGY

EMC & RF

ACCELONIX BV
EMC & RF Solutions

Antennas, Masts,
Positioners & Probes

Amplifiers & Pre-Amps

Chambers & systems

TESEQ
Advanced Test Solutions for EMC

MILMEGA
RF/Microwave Amplifiers

AMETEK®
COMPLIANCE TEST SOLUTIONS

FCC
Fischer Custom Communications, Inc.

IET
IET LABS, INC.
in the GenRad Tradition

Chroma
Advancing Excellence

emtest
the benchmark for emc

ETS·LINDGREN®
An ESCO Technologies Company

MPE
Quality, Reliability, Performance
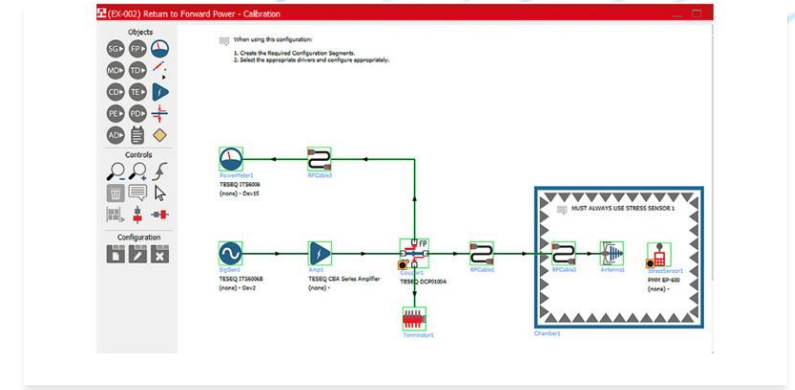
HUNTRON

Laplace Instruments Ltd

ACCELONIX BV
EMC & RF Solutions

Harmonics & Flicker

Automotive EMC

EMC Software

ACCELONIX BV
EMC & RF Solutions

EMI & Tempest Filters

GTEM & Test Cells

MIL STD Test

ACCELONIX BV
EMC & RF Solutions

RF Coupling Networks & Devices

RF LISN & ISN

RF Immunity Test

ACCELONIX BV
EMC & RF Solutions

Transient Immunity Test

RF Emission Test

ACCELONIX BV
EMC & RF Solutions

EMI Receivers

Test & Measurement

MICRO & POWER ELECTRONICS ASSEMBLY

ACCELONIX BV

Micro | Power Electronics Packaging Solutions
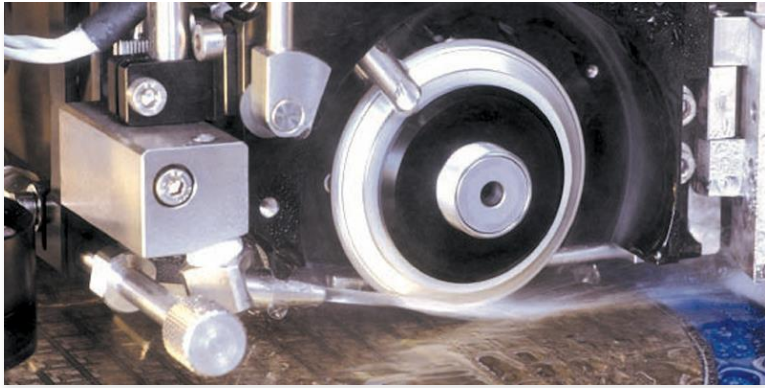
Dicing
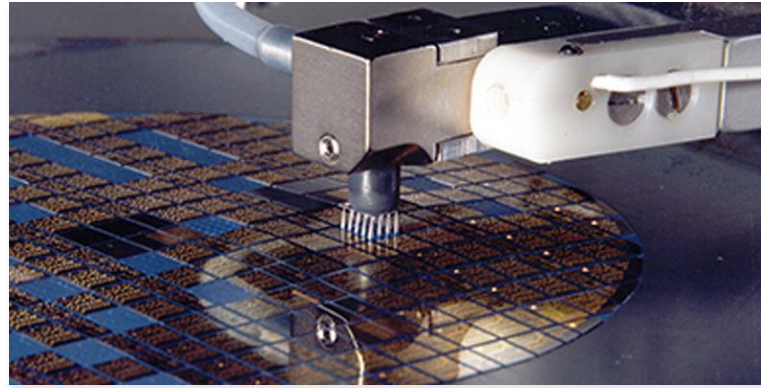
Die Sorting
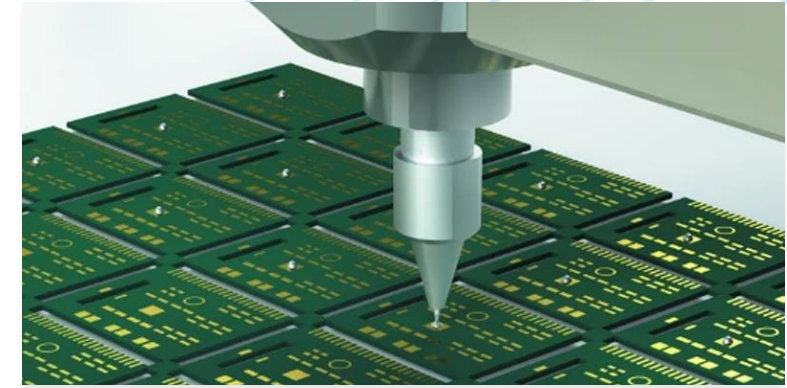
Dispensing

ACCELONIX BV
Micro | Power Electronics Packaging Solutions

Die Bonding
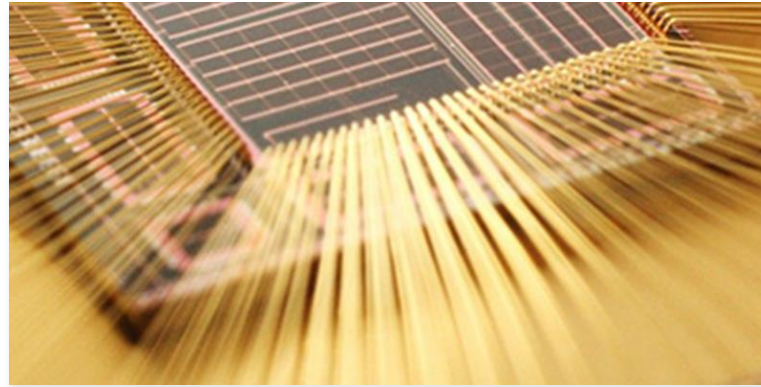
Wire Bonding
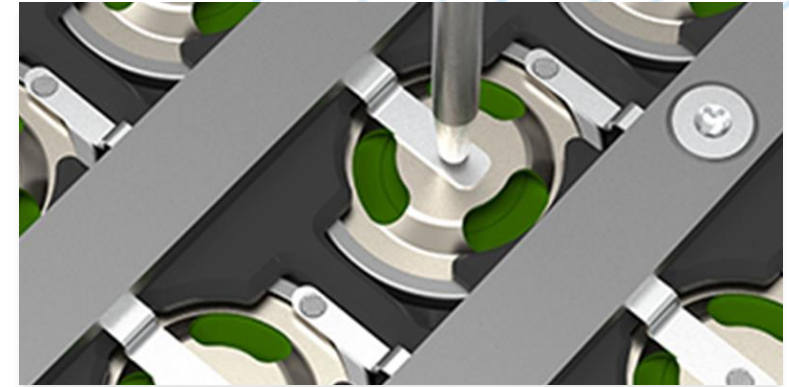
Battery / High Power Bonders

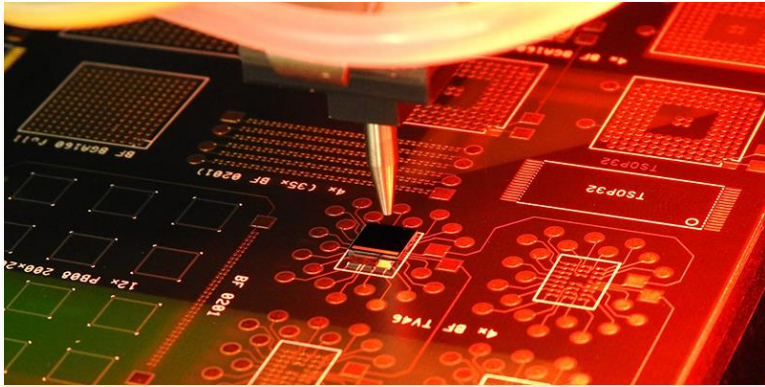# ACCELONIX BV
Micro | Power Electronics Packaging Solutions
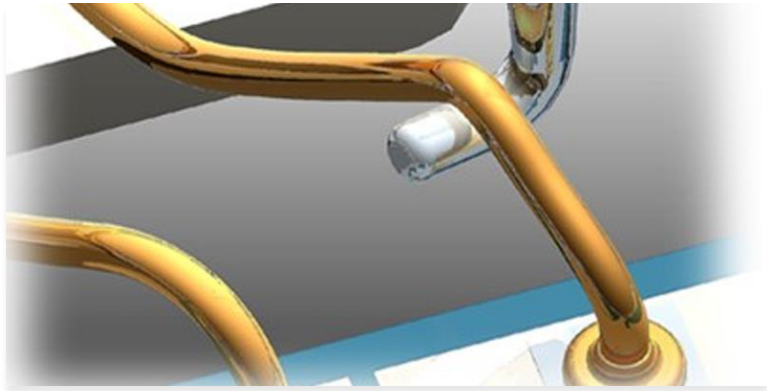
Bond Testing
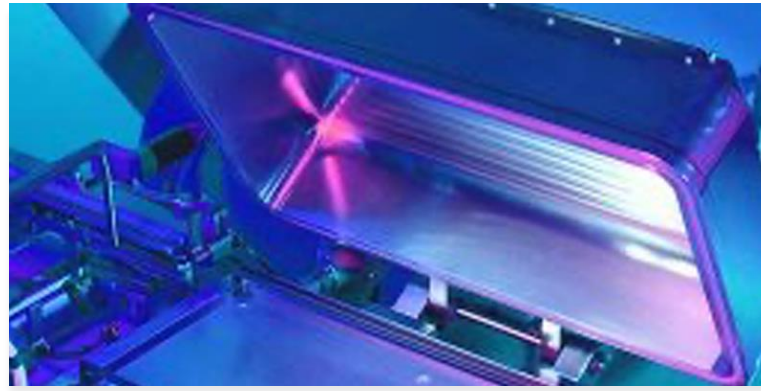
Plasma Cleaning
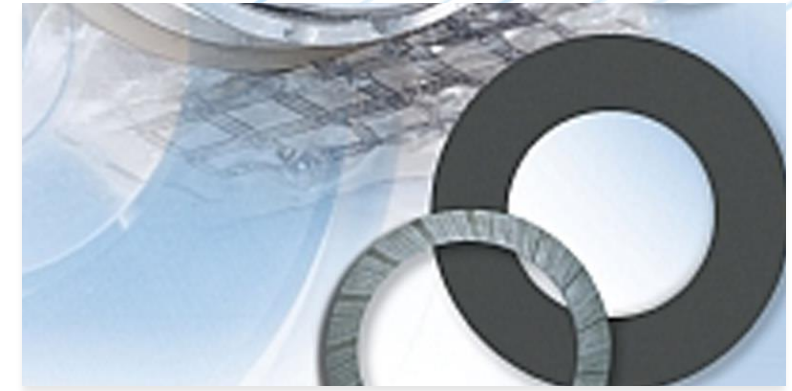
Consumables
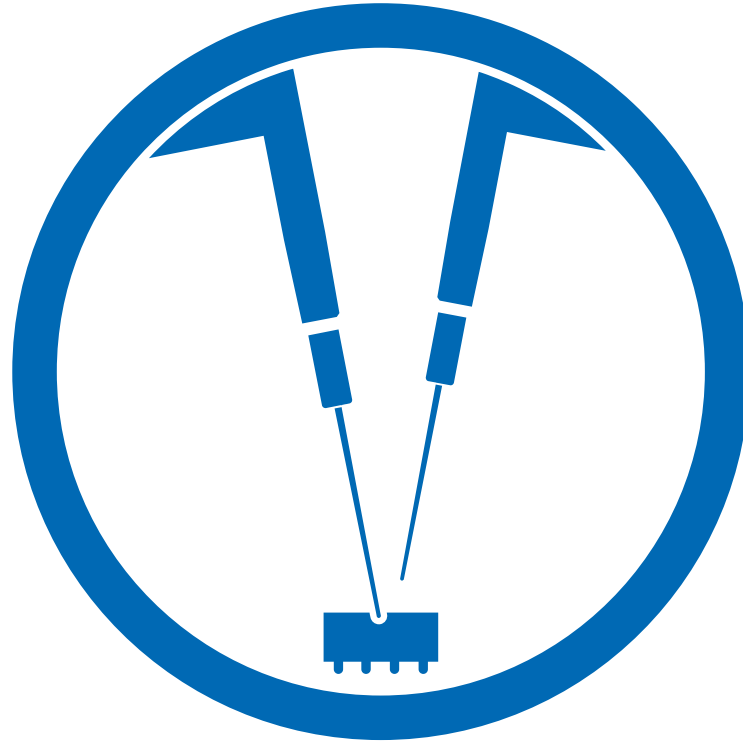
PCBA INSPECTION & TEST

ACCELONIX BV
PCBA Test & Inspection Solutions

3D AOI & SPI

Embedded JTAG Bscan Test
In-System Programming

Device Programming

ACCELONIX BV

PCBA Test & Inspection Solutions

FA & Visual Inspection
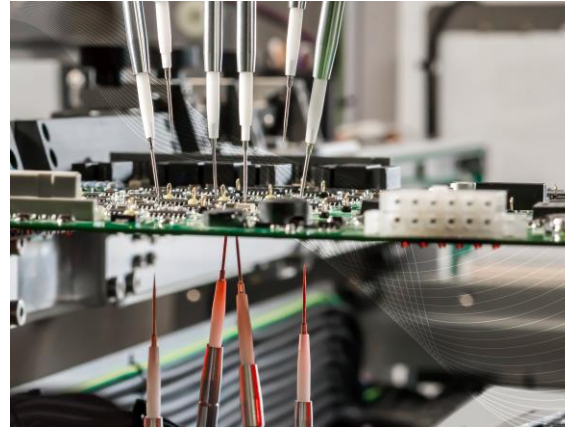
Flying Probe Test
Standalone & Inline

DfT, DfM, Test Coverage, NPI,
Repair & Traceability Software

CHECKSUM ✓ comet yxlon GÖPEL electronic Enjoy Testing VCcount by VisiConsult ASTER TECHNOLOGIES

Data iO TAKAYA Chroma Advancing Excellence IET LABS, INC. in the GenRad Tradition HUNTRON Accelonix SOFTWARE

ACCELONIX BV
PCBA Test & Inspection Solutions
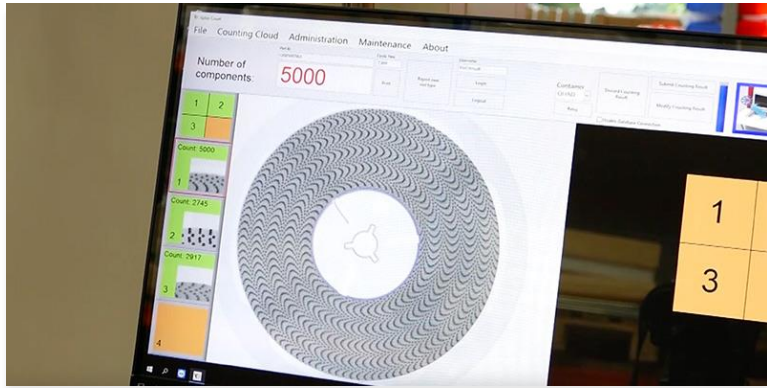
X-Ray Component Counting
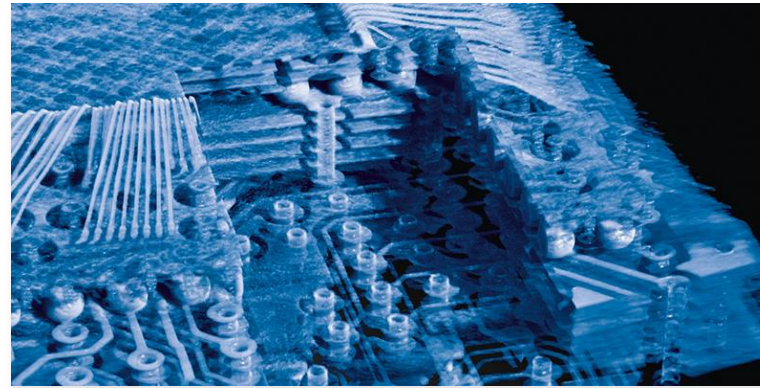
X-Ray Inspection
Manual & Inline

Repair & Troubleshoot
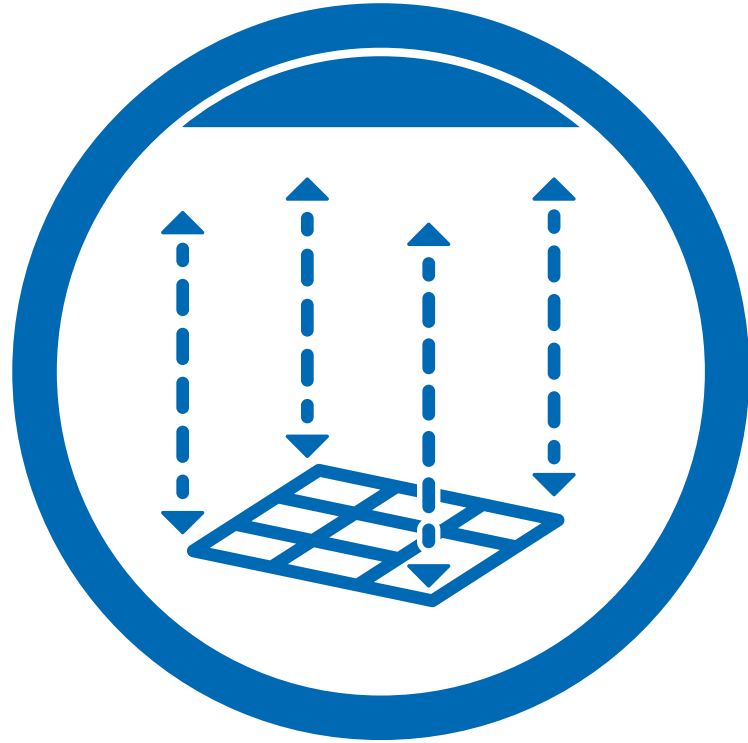
METROLOGY

ACCELONIX BV
Metrology Solutions
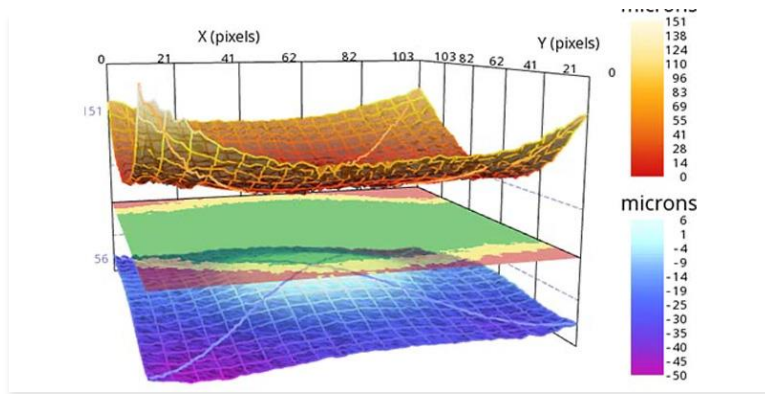
Thermal Warpage and
Strain Metroloy
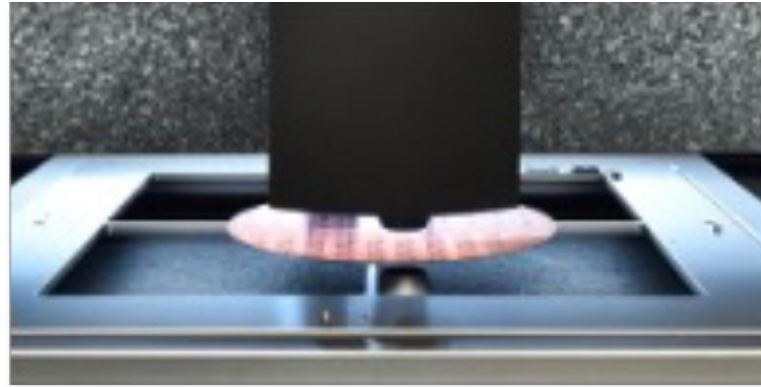
3D Non-Contact Surface
Metrology
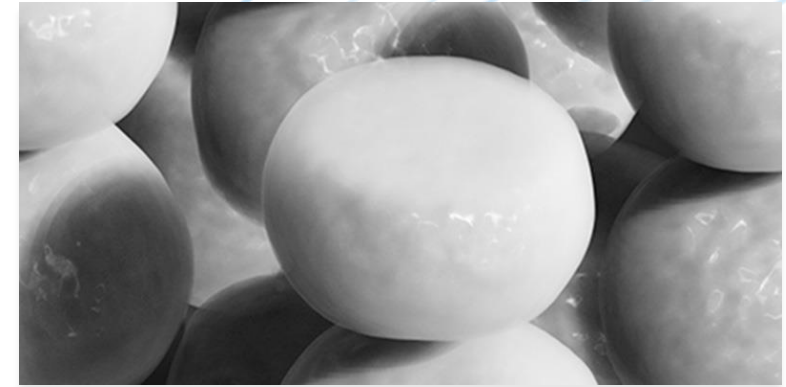
X-Ray and CT Metrology
(Computed Tomography)

SERVICES AND SUPPORT

ACCELONIX BV

Services and Support

Flying Probe
Test Service
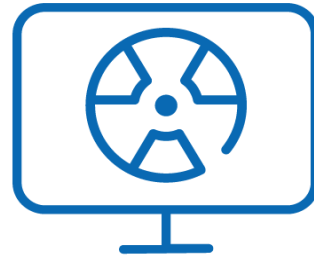
X-ray & CT
Inspection
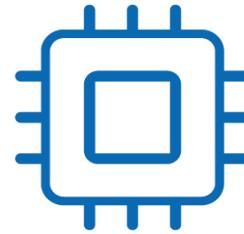
Micro Electronics
Packaging

Equipment
Rental
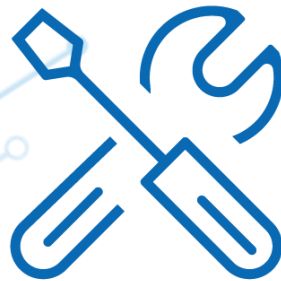
Repair &
Calibration
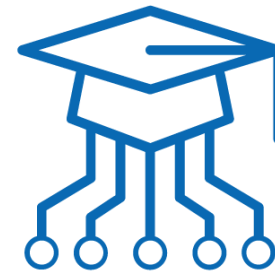
Training
Consultancy

ACCELONIX BV

Support

New Equipment

- Pre-installation Requirement
- Installation and Commissioning
- Training and Application Support

Life Cycle Support

- Calibration and Preventive Maintenance
- Repair
- Support Contracts: including telephone, e-mail and swift on-site support
- Upgrades and Updates

ACCELONIX BV

Production Services

Local based production services

- Wire Bonding and Die Bonding Prototyping
- Battery Bonding
- X-ray 2D, 2.5D & 3D Inspection Service
- Flying Probe Test and JTAG/Bscan Testing

Rental

- EMC Generators, RF Amplifiers

ACCELONIX BV

- Solution provider

- Cross-Sell Complementary products, creating bundled solutions to meet wider range of customer needs.

- Technical skilled and trained Sales and Service personal with many year experience operating in Electronics industry and local market expertise.

- Intensive customer contact

- Excellent after sales support and services

- Streamline communication between manufacturer and the target market.

Accelonix
Inspection Xpress
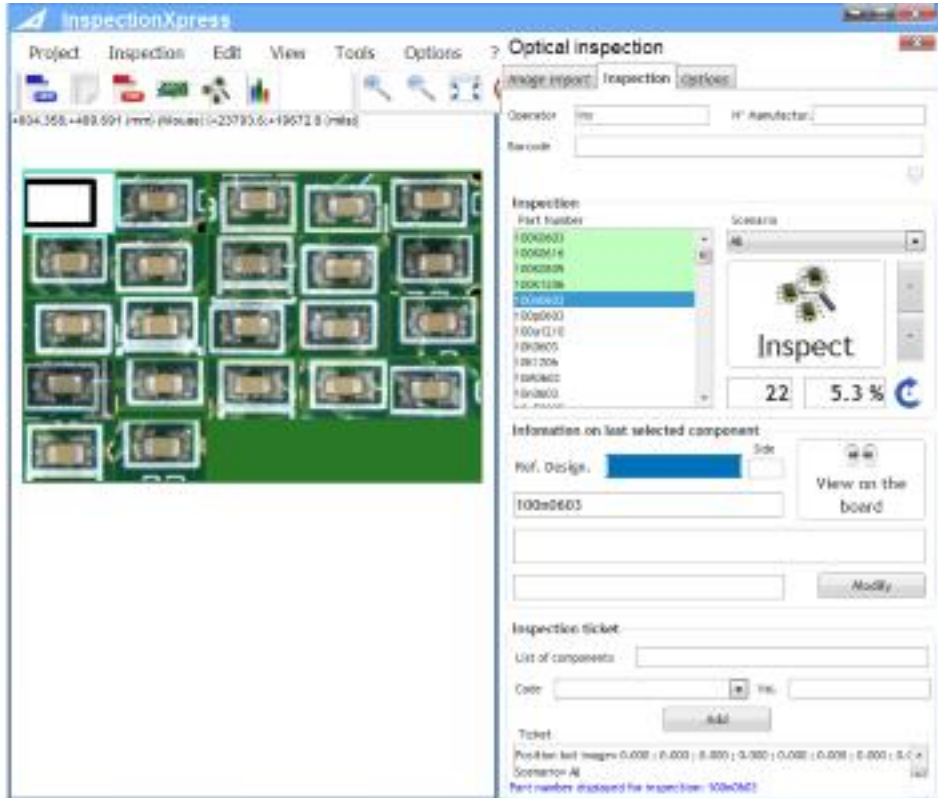
Inspection Xpress is a powerful solution for the visual inspection of first article, prototypes, small-series production, sampling and Final Inspection.

- Inspection Xpress Reduces Inspection Time
- Uses a Unique way to Display Components during Inspection
- Integrated scanner or external imaging system
- Works with almost all image formats
- Cost Effective

Goepel
Automated Optical Inspection

Inline and Standalone SPI and AOI Systems for 3D, 2D, and angled camera's.
Optimized Systems for THT Inspection.

Component and solder defects detected by 3D AOI systems

- New 3D AOI module with real 3D measurement of solder joints and components without shadowing effects

- Stable inspection with almost zero false call and pseudo error rate.

- MagicClick automated inspection program generation in minutes

- High end camera modules including illumination from Infrared to Ultraviolet and 3D/2D Angled View Inspection over 360°

- PILOT AOI software with powerful functions for component recognition, solder joint and short inspection, OCR, color verification as well as solder paste inspection.

X-Ray Inspection

- Fast X-ray InspectionSolutions for 2D, 3D and laminography

- Easy and intuitive operation

- FeinFocus X-ray tube technology
- High Power Target technology
- Finely calibrated, long-life flat-panel detector
- Manipulator with cushioned bearings
- Variety of sample tables
- 2D, 2.5D and 3D images with extremely high resolution
- Accurate void detection, including multi area voiding
- Fast, automated, easy ADR routines
- Very fast live (on the fly) inspections
- CT and microCT module for in-depth 3D examination via virtual cross sections and layers
- QuickScan® module, for 3D images and virtual slices within a minute.
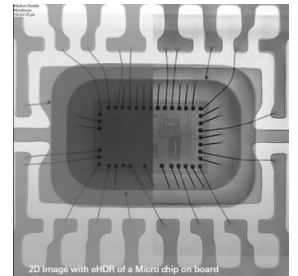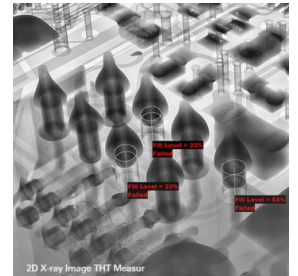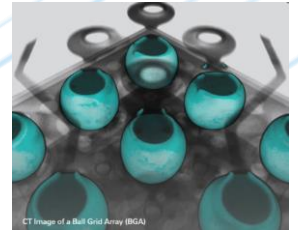
Goepel
Automated X-Ray (& AOI) Inspection

Inline AX(O)I System for 2D and 3D X-ray Inspection of (hidden) solder joints and components. Optional AOI integration.
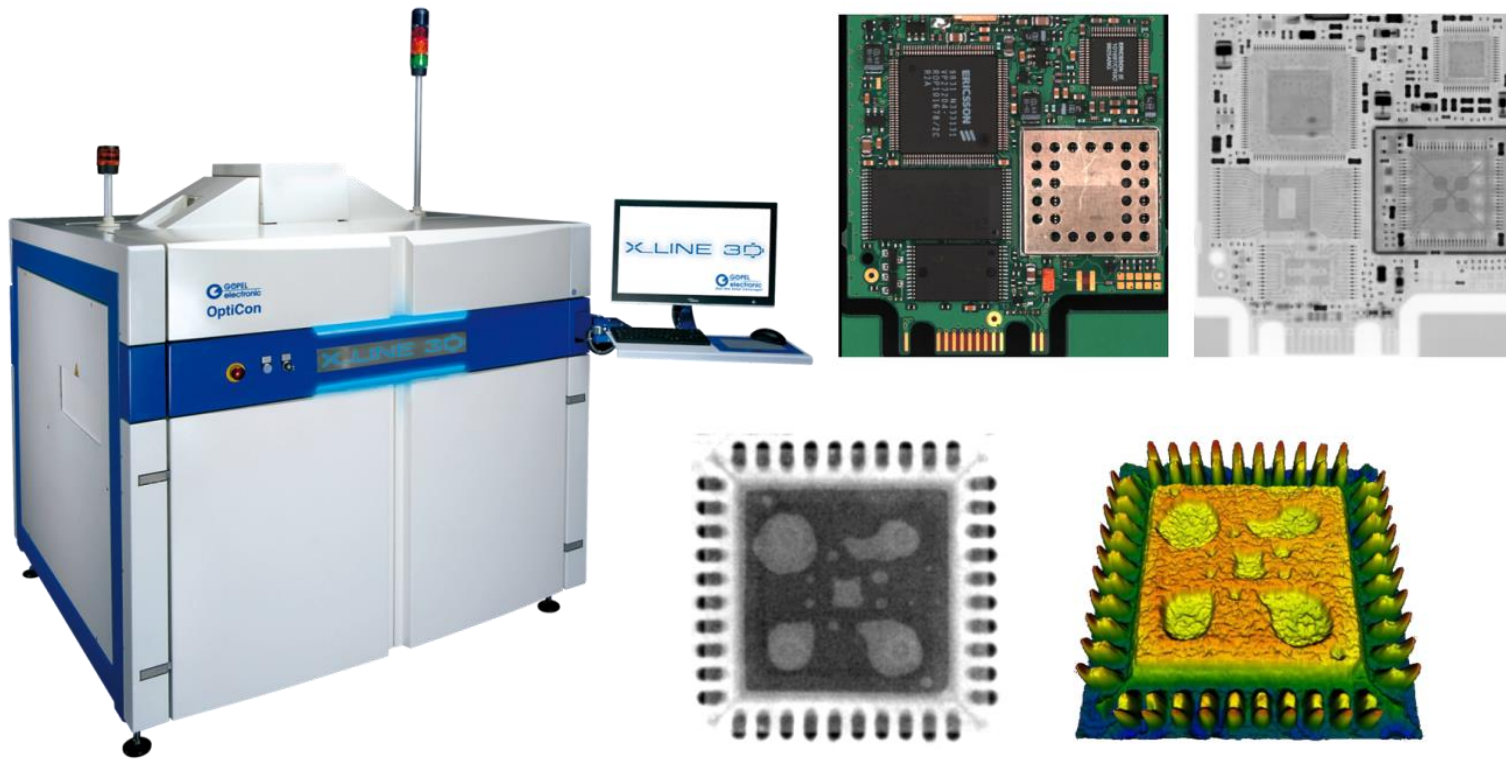
- Revolutionary GigaPixel technology with real-time multi angle image recording for fastest test speed at full 3D PCB capturing.

- Solder joints analysis on various levels and determine the wetting state.

- Reconstruction processes with tomosynthesis.

- Simultaneous inspection of top and bottom side of a double sided PCB.

- Reduced PCB handling time of 5 s

- Software XI-PILOT with Algorithm library suitable for all common components.

- Combination with AOI inspection module in 1 system.

Takaya
Flying Probe Test

New generation flying probe test system high test speed, positioning accuracy and test coverage. Facilitates testing for R&D prototypes and NPI up to low-volume productions.
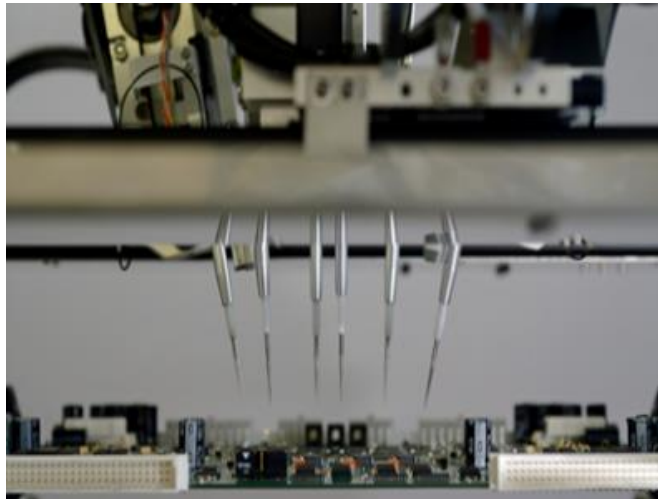
- Flying 4-Head and 6 Z-Mechanisms
- Highly Accurate Measurement System
- Strong and Rigid XY Stage
- Ultrafast Test Speed
- Color Camera System and Real Map Software
- Easy and User Friendly Software and Security Function
- Attenuating Contact Pressure of Probes
- Versatile Test Options, including Optical Test, Sensor test and more
- In-Line System

Goepel
JTAG/Boundary Scan

CASCON GALAXY Boundary scan test and programming suite.
With unique JTAG/Boundary Scan programming language, extensive
Library and Push button ATPG tool. Including Emulation Test (VarioTAP)
en embedded instrumentation (ChipVorx).
Features Automatic fault diagnosis on pin level.
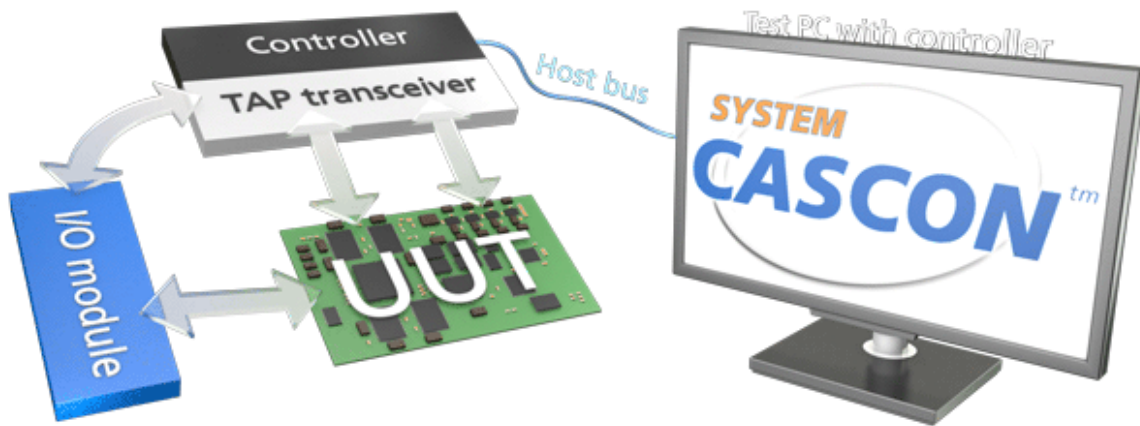
- Wide range of hardware controllers, TAP interfaces and I/O Modules
- Full software support by JTAG/Boundary Scan development environment SYSTEM CASCON
- Scalable TCK frequency up to 100MHz
- Applicable for Standard Boundary Scan test, in-system programming (ISP) and in-system configuration (ISC)
- Easy integration based on preconfigured plug-ins (NI LabView, TestStand, other ATE)
- Universal solutions for laboratory and production

FlashFOX
New generation stand-alone flash programmer for production

Aster
twExpress

Powerfull manufacturing engineering tools that combine early DFM and DFT with smart NPI tools, including testcoverage analysis.
Based on production yield calculations it is possible to optimize and combine various types of inspection and test strategies within an integrated productionflow.
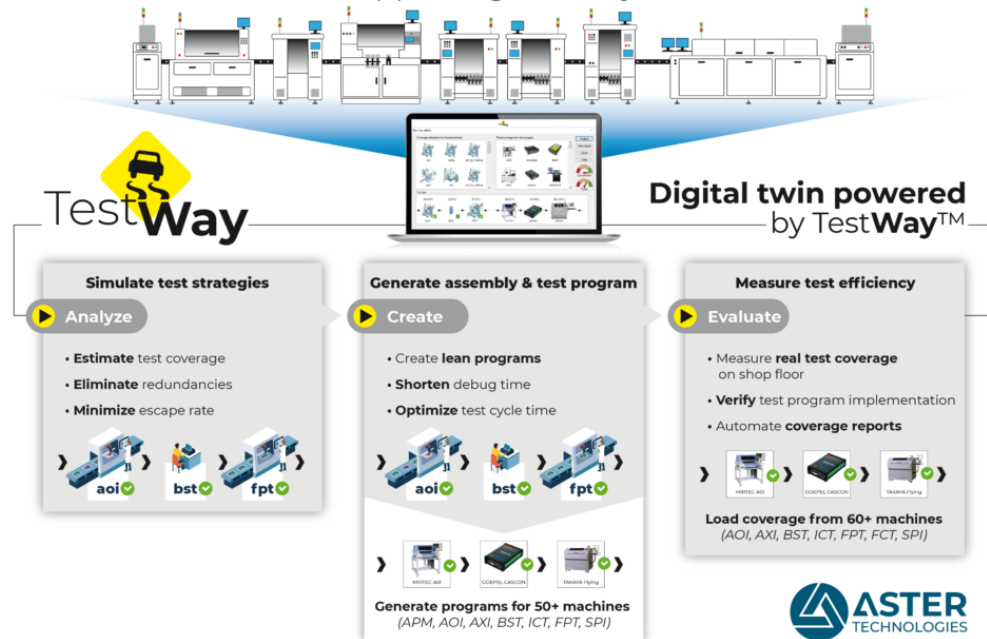
- Board,CAD & System visualization
- DfX rules checking
- Test coverage estimation & measurement
- Functional test coverage declaration
- Test Probe Analyzer & Test point saving
- Test and Assembly Machine Interfaces
- Shop floor documentation
- Advanced reporting
- Test Cost modeling
- Fault ticket viewer with Repair & Diagnostic aid
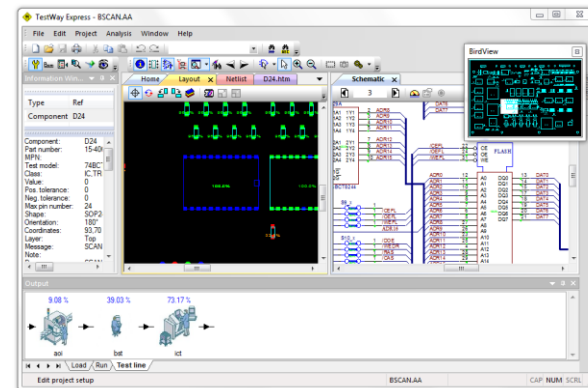
Aster
Quad

Flexible modular Quality Management system, providing traceability, for the PCB electronic production data.
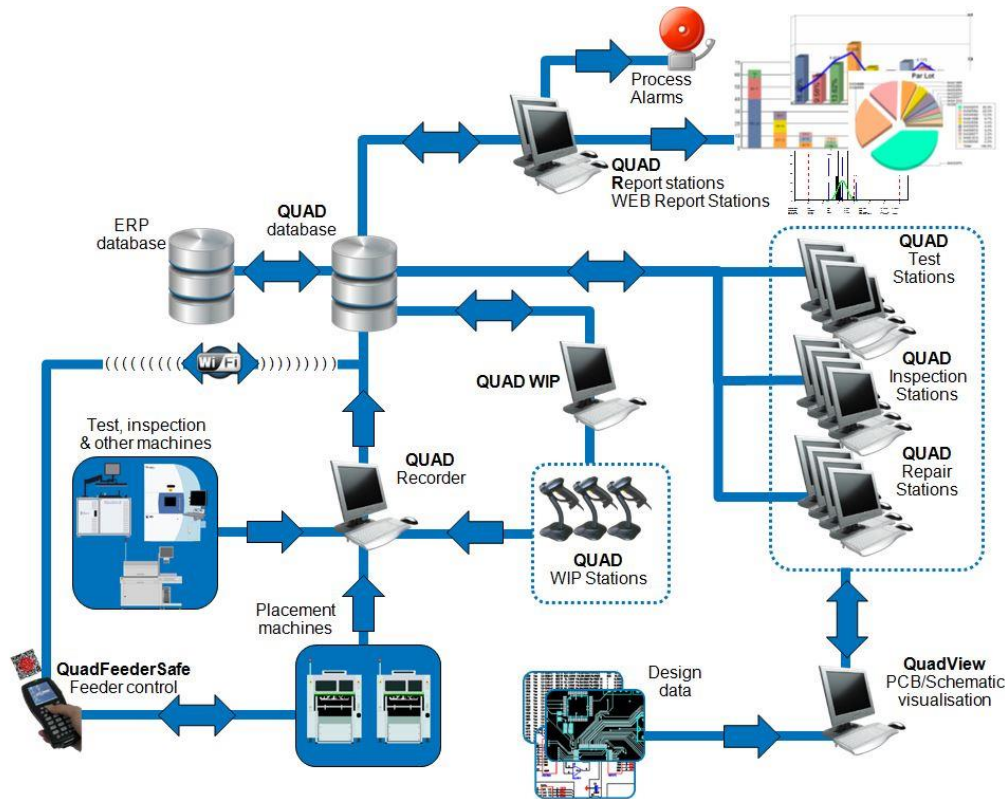
QuadRecorder
automatically collect data from sources on your shop floor. Once the data is collected, the tools can be applied for paperless inspection, test, diagnosis and repair.

QuadFeederSafe
for production component management, feeder management, loading management and component traceability.

QuadWIP
for board or batch location and timing checks.

QuadReports and **QuadWebReports**
for production and publication of real time reports and alarms.

Quad-DPMO
extracts the true Defect Per Million Opportunities from the traceability database, built from the production line.

Data I/O
Device Programming

For nearly 40 years, Data I/O Corporation has been the world leader in the manufacture, distribution and service of innovative solutions for programmable devices.

- PSV-series: Fully automated programming
- FlashPAK: Versatile device programmer
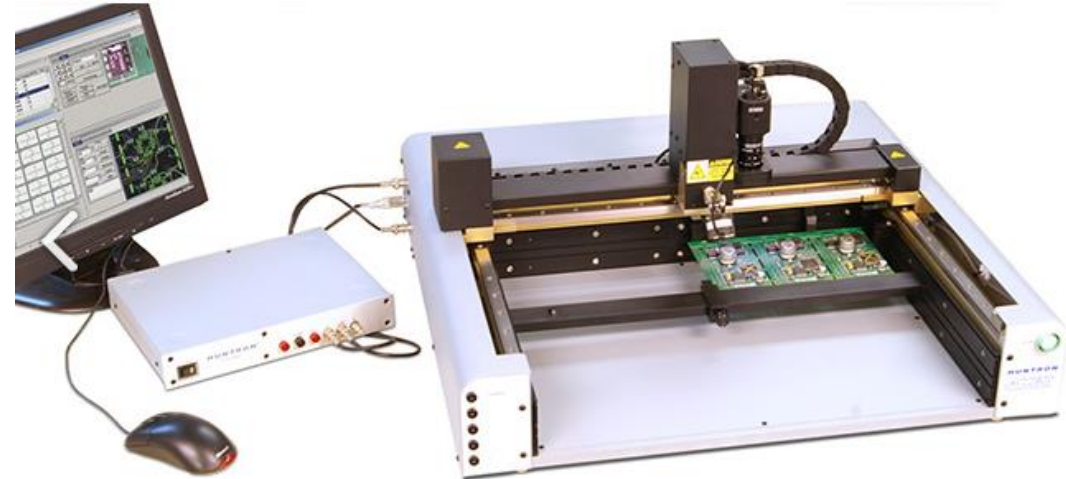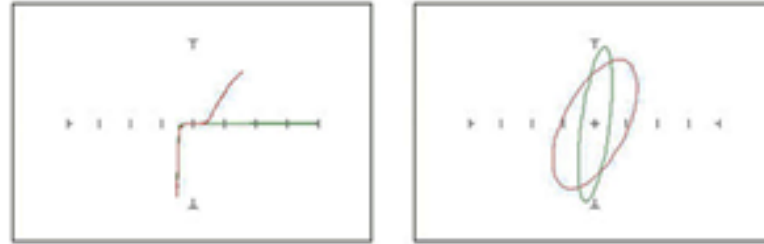- LumenX: Large density Flash, eMMC devices

Engineered for speed and accuracy, the PSV3500/5000/7000

Huntron
Repair and Troubleshoot

Power-off Diagnostic Tools for PCBA
Troubleshooting.

- ASA technology
- Benchtop trackers
- Robotic Probers
- Workstation software
- Integrations

XRH Count
Component inventory counting

XRHCount is a compact X-ray unit to count all common and most special SMT component-types on reels with a diameter up to 400mm.

- Counting of components in Reels, Trays, Sticks, Bags
- Multiple Reel Counting
- Automatic barcode recognition
- Recognition of odd shapes
- Splicing Detection
- 8,5 sec. cycle time
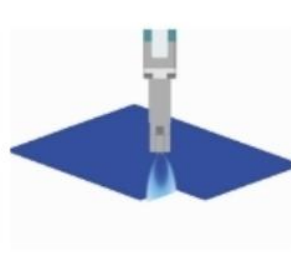- Statistic suite
- MES Connection
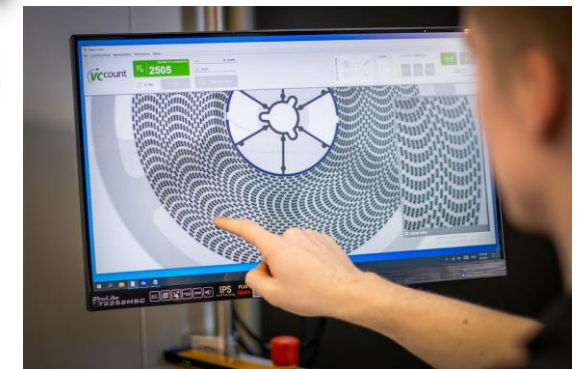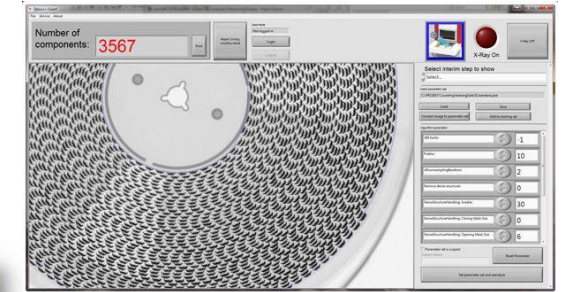
Musashi Engineering
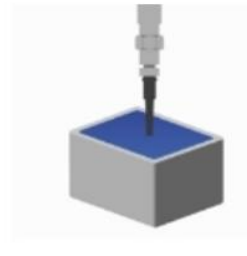# Coating, Dispensing & Jetting Equipment

Dot dispensing

Line dispensing

coating

Filling

Desktop robots
High-Precision and High-Rigidity Gate Type Desktop Robot SHOTMASTERΩX

Desktop robots
Desktop Robot with PC Controlled Image Recognition Function 350PCSmart SMΩX

NEW
Fully automatic dispensing system
Full-automatic substrates FCD1200

Fully automatic dispensing system
Fully Automatic Substrate Coating Machine FCD1000

Musashi Engineering provides an abundant lineup of products including dispensing head controllers as a core of the dispensing system, desktop robots that control precision dispensing, fully automatic dispensing and coating devices, and parts such as nozzles and syringes.

Accelonix
keeping you ahead

www.accelonix.nl   Accelonix Benelux   accelonixbnx BV