KEERS Technologies

New and Refurbished ATE Systems
SMT Equipment and Feeders
Boundary Scan and In-System Programming

Products and Solutions Catalog

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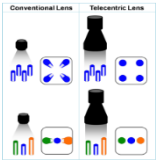
Automated Optical Inspection Systems

MV-3 Desktop

MIRTEC Desktop and InLine AOI Systems

The MV-7 and MV-3 Series from Mirtec offer Advanced 5, 10 or 15 Mega Pixel Digital Colour Camera Technology in an Inline AOI system. This technology provides the ultimate inspection performance and speed.
The optional Side Viewer® Camera System provides enhanced inspection capability through the addition of four 5 and 10 Mega Pixel Side View Digital Colour Cameras.
Thus also the check of complex components becomes a piece of cake.

The optional Intelli-Scan Laser System provides “The Third Dimension in Inspection Capability”, the ability to precisely measure the Z-hight of any given region of interest.
This technology yields absolute detection of lifted leads on gull wing devices and true coplanarity testing of BGA and CSP devices
This revolutionary technology is not available on any other AOI system!



MV-7 Inline

MIRTEC 3D Solder Paste Inspection Systems

Most defects that impact yields occur in the solder paste printing process.
You can’t optimize your process and maintain high yields if your SPI technology is unreliable or can’t ‘see’ the problems.
The in line SPI system MS-11 from MIRTEC uses "Shadow Free" Moiré Phase Shift image processing and ultra high resolution 2, 4 or 15 Mega Pixel Camera Technology for precision postprint PCB inspection with no false calls, no escapes and no shadows.

The MS-11 uses the same robust platform as MIRTEC's MV-7xi AOI system. Inspection heads are interchangeable between the two systems adding ultimate flexibility to the inspection process.

MS-11

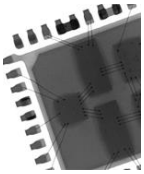
X-Ray Inspection Systems

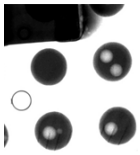
SCIENSCOPE X-Scope 1000

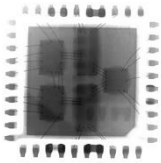
The X-SCOPE 1000 X-Ray Inspection System is a smaller, less costly high resolution x-ray inspection system designed for batch inspection.

Standard features of the X-Scope 1000 X-Ray Inspection System

A 2”x2” digital flat panel x-ray detector
90 kV- 7 micron x ray tube
Z axis movement of the x-ray tube and sample stage
Computer controlled kV and mA settings
Computer controlled variable speed X-Y stage
Full featured Image processing CPU with 17 inch LCD flat panel monitor
Optional 360 degree sample stage rotation available







SCIENSCOPE X-Scope 1800

The X-Scope 1800 X-Ray Inspection System is the new addition to the X-SCOPE Series inspection systems featuring wide inspection area with tilting X-Ray tube capability.

Standard features of the X-Scope 1800 X-Ray Inspection System

A 2”x2” digital flat panel x-ray detector
90 kV- 5micron x ray tube
Z axis movement of the x-ray tube
Computer controlled kV and mA settings
Computer controlled variable speed X-Y stage
Full featured Image processing CPU with 17 inch LCD flat panel monitor
70 degree tilting tube and detector
4096 Shades of Grayscale
1.3 Megapixel Mapping Camera

X-Ray Inspection Systems

SCIENSCOPE X-Scope 2000

The X-Scope 2000/2300 X-Ray Inspection System is a full featured high-performance x-ray inspection system with an unbeatable price to performance ratio and many advanced features you would expect to find on a much more expensive x-ray inspection system.

Standard features of the X-Scope 2000 X-Ray Inspection System

4/2 dual field image intensifier with mega pixel camera (2”x2” Flat Panel Detector Optional)
90 kV- 5 micron x-ray tube
Z axis programmable computer controlled movement of the x-ray tube and image detector
Computer controlled kV and mA settings
Programmable computer controlled - variable speed X-Y stage with a 75 degree sample tilt fixture
Full featured Image processing CPU with 22 inch LCD flat panel monitor
Mega pixel mapping camera with zoom window – easy location and identification of faults
16” X 18” Inspection Stage

SCIENSCOPE X-Scope 5000

The X-Scope 5000 X-Ray Inspection System is a large capacity high resolution – high magnification x-ray inspection system. This unit has the ability to be upgraded to a full volumetric 3-d CT x-ray system.

Standard features of the X-Scope 5000 X-Ray Inspection System

2”x2” Flat Panel Image Detector with 4096 Shades of Grayscale
160 kV- 1 micron open x-ray tube or 130kV - 3 micron closed x-ray tube
Z axis movement of the x-ray image intensifier
70 Degree ark of the image detector
Computer controlled kV and mA settings
Computer controlled variable speed X-Y stage
Manual and Automated Inspection Routines
Full featured image processing CPU with 22 inch LCD flat panel monitor
Full volumetric 3-D CT upgrade (optional)
17” x 16” Sample Stage 360 Degree Rotation (optional)
23" x 23" Inspection Stage
6000X System Magnification

PCB Board Handling Systems

KEERS Technologies offers a complete line of Economical PCB board handling solutions. Conveyors, buffers, loaders and unloaders, gates, turn units and workstations are available as standard and customized products can be developed on request in order to fit special requirements.

All our board handling systems are CE approved.

Below some examples of our extensive program:

Multi Magazine Loader

NG/OK Unloader

PCB Destacker

90° Turn Conveyor

Microscope and Video Measurement Systems

SCIENSCOPE Micro Zoom Video Inspection Systems

This optical system can provide a high magnification image without chromatic aberration and distortion. Detented zoom for repeatable magnification settings and built-in internal focus module are perfect for FOV measurement applications as well as general inspection.

Packages include a USB or WSXGA camera, choice of stand and lighting. USB cameras are great for capturing images with a computer. While WSXGA cameras can capture images to directly to an SD card while viewing a live image on an LCD monitor. You can also add measurement, annotation, and image comparison software to USB cameras.

SCIENSCOPE Macro Zoom Video Inspection Systems

The Macro Zoom lens has the most Depth of Field and Field of View available from a video lens with all adjustment at your finger tips such as zoom, focus, and iris control.

Packages include a USB or WSXGA camera, choice of stand and lighting. USB cameras are great for capturing images with a computer. While WSXGA cameras can capture images to directly to an SD card while viewing a live image on an LCD monitor. You can also add measurement, annotation, and image comparison software to USB cameras.

SCIENSCOPE XT-1000 VMU

The XT-1000 VMU is a 2-axis, compact, easy to use, cost effective desktop system for small part inspection. It is perfect for engineers, researchers, designers and anyone inspecting small parts.

Measurement Machine and Computer

- Plug and play with integrated All-In-One 22" touch screen PC
- Quick Release 4" x 8" Stage
- 1 Micron Resolution Optical Encoders
- High Resolution Large Live Image & Geometric CAD image
- Zoom Lens with Detents
- 1.3 Megapixel Color USB Camera
- 22" ALL-IN-ONE Microsoft Windows 7 Touch Screen PC
- LED Top Light (ring light on lens) & Back Light (below the stage)
- 2 Axis Measurement
- Aluminum alloy construction: light-weight and portable.

OVM-Lite Measurement Software

- Single point edge detection
- Multiple datums
- Image capture
- Edge transition crosshair indicator
- Import & export CAD DXF File, Text, and Excel
- Measures point, line, circle, arc, angle, ellipse, B-splinecurve, center point, distance & more

SCIENSCOPE XT-2000 VMP Video Measurement System

The fully self contained XT-2000 VMP is an efficient compact floor standing model again featuring all granite structure and steel stage. As well the system is ergonomically designed with stage positioning, lighting and Z axis focusing right in front of the operator. Advanced intuitive edge detection software makes part measurement and easy to learn quick process. Scienscope measurement software is very easy to use, not requiring a dedicated specially trained operator .

Boundary Scan Solutions

KEERS Technologies is a Technology partner from XJTAG. We provide the full portfolio of XJTAG boundary Scan tools from R&D to your Manufacturing floor. Either as a stand alone station or integrated into your In-Circuit or functional test systems.

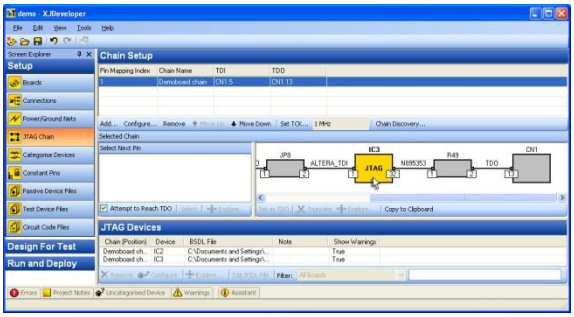
XJTAG provides industry leading hardware and software boundary scan products to speed up circuit design and development, through to production test and field maintenance. We can offer you a full range of JTAG products to help you debug board designs with BGAs, test hardware that includes FPGAs, CPLDs, DSPs or microprocessors, detect faults and prove your design quickly and easily

XJTAG Development System

The XJTAG Development System is an established test suite with a range of software and hardware products that enable you to debug, test and program electronic circuits quickly and easily. The system works with devices that conform to the IEEE 1149.1 and 1149.6 boundary scan standards.

	XJDeveloper	Connection Test	XJEase	XJAnalyser	XJRunner	XJDemo & Tutorials	3rd Party Integration	Chain Debugger	Support & Maintenance	XJEase Libraries	XJIO or XJIO-PCI Board	XJLink2 (USB to JTAG)	XJLink (USB to JTAG)	PXI module	Layout Viewer
XJTAG XTR Professional	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓
XJTAG XTR Standard	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓
XJTAG Professional	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓
XJTAG Standard	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓
XJTAG Standard PXI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓

XJTAG is designed, developed and supported by Cambridge graduates to enable developers and test engineers to unlock the potential of boundary scan. XJTAG can help you speed up the design and development process and improve your debug and testing throughout the whole product lifecycle.



KEERS Technologies

In-System Programming

KEERS Technologies offers High End, Ultra fast, Universal In-System programmers from Algocraft, the WriteNow! Series

Algocraft develops and markets a wide range of professional systems dedicated to the manufacturing and testing of electronic boards. The main series of products is the WriteNow! Series of In-System Programmers, which are completely designed and produced by Algocraft.

Main Features

- Ultra-fast, universal In-System Programmers
- True parallel, program up to 8 devices at once
- Industrial-grade reliability
- Standalone operations or host controlled
- Easy to install and to use
- Compact size, fixture friendly

Based on the proprietary WriteNow! Technology, the WriteNow! Series of In-System Programmers is a breakthrough in the programming industry. The programmers support a large number of devices (microcontrollers, memories, CPLDs and other programmable devices) from various manufacturers and have a compact size for easy ATE/fixture integration. They work in standalone or connected to a host PC (RS-232, LAN and USB connections are built-in), and are provided with easy-to-use software utilities.

The WriteNow! Series of In-System Programmers is available in four models, which share a common in-system programming core. Single-site model features a relay barrier on ISP I/O lines.

WN-PRG01A	Single-Site In-System Programmer
WN-PRG02A	2-Site In-System Programmer
WN-PRG04A	4-Site In-System Programmer
WN-PRG08A	8-Site In-System Programmer

Silicon Supported

- Atmel
- Freescale
- Infineon
- Microchip
- Numonyx
- NXP
- Renesas
- SST
- STMicroelectronics
- Texas Instruments
- Winbond
- New manufacturers and devices are constantly added

Refurbished In-Circuit Test Systems

With more than 20 years experience in the In-Circuit Test world KEERS Technologies offers complete refurbished In-Circuit testers from the leading manufacturers Agilent Technologies and Teradyne. The testers we supply are build to order and come installed and calibrated on your manufacturing floor.

The pre-owned Agilent and Teradyne systems we provide to our customers have gone through an extensive refurbishment process and each system will have completed the following steps prior to being shipped to you:

- Complete teardown and cleaning
- Systems components are tested with parts being replaced as needed
- Panels are repainted
- MINT pins replaced
- New Flat screen, keyboard, mouse and printer included
- Complete burn-in, system diagnostics and calibration.

Agilent Technologies

Every pre-owned refurbished system from KEERS Technologies ships with a 30 Day Warranty to assure your complete satisfaction. Our quotes also include pricing to add an optional Annual Service Contract 'ACS' . These are attractively priced and provide added protection against expensive failures and system downtime.
Our OEM trained field service engineers, with an average of 20 years experience, can also provide the following:

- Free Phone support to help you diagnose a problem.
- Repair-Exchange services for overnight emergency service.
- Repair-Return services for parts you need repaired on a less urgent basis.
- On-site services calls, system calibrations and staff training

TERADYNE

KEERS Technologies

Used SMT and ATE Equipment

In Partnership with Lewis and Clark, KEERS Technologies offers a full portfolio of ATE and PCB Assembly systems for the electronic Manufacturing Industry ranging from Screenprinters to x/Ray inspection systems.

Below some examples we´ve offered:

KEERS Technologies

SMT Feeders

Besides used Pick and Place systems we offer feeders for most systems used at our customers. All our feeders are checked, calibrated and come with a minimum of 30 days warranty.

We offer:

- Assembléon/Philips
- Siemens
- Fuji
- Mydata
- Universal
- Hover Davis
- Juki
- Quad
- And many others

Assembléon ITF2

Mydata Agilis

Fuji NXT

Assembléon Stickfeeder

Panasonic

Services and Support

Automated Test Equipment Services
In-Circuit Test, Optical Inspection and X-Ray Inspection are area's where a lot of expertise is involved. KEERS Technologies offers this expertise with a team of highly skilled engineers.

We offer on-site training and consulting to maximize the Return on Investment of your capital investment.

Uptime Services
Our In-Circuit Test Service Capabilities include; Traceable system calibrations, Per-incident onsite service, System support contracts, Preventive maintenance, De-installation and installation services and System upgrades.

Spare Parts
We have a large stock of spare parts with overnight delivery capabilities in Europe

Transport Services
Moving a system sounds easier than it actually might be. We offer full de-installation, crating and transporting of your valuable assets.



Example: Vacuum sealing and crating of Agilent 5DX

Education
Probably your engineers got trained after your ATE systems were first installed. But good engineers move on and new ones arrive.

For these cases, and others, we offer on-site consultancy and training to get the maximum performance out of your ATE systems. All our engineers are factory trained and have a long history in the industry.

We offer all our services in Europe and Africa..

About KEERS Technologies

KEERS Technologies started in 2009 with a key focus on refurbished Agilent In-Circuit Test Systems, Optical Inspection Systems and X-Ray Inspection Systems.

In our short period of existence we have grown to a solid player in the Used Equipment market and provide our systems to many small and larger enterprise customers around the world.

Besides the used equipment KEERS Technologies has a strong portfolio of quality systems and solutions for the Electronics Manufacturing market in the Benelux countries.

KEERS Technologies offers service and support either direct or trough our business partners located in close proximity to our customers.