Matrox Imaging Corporate Profile

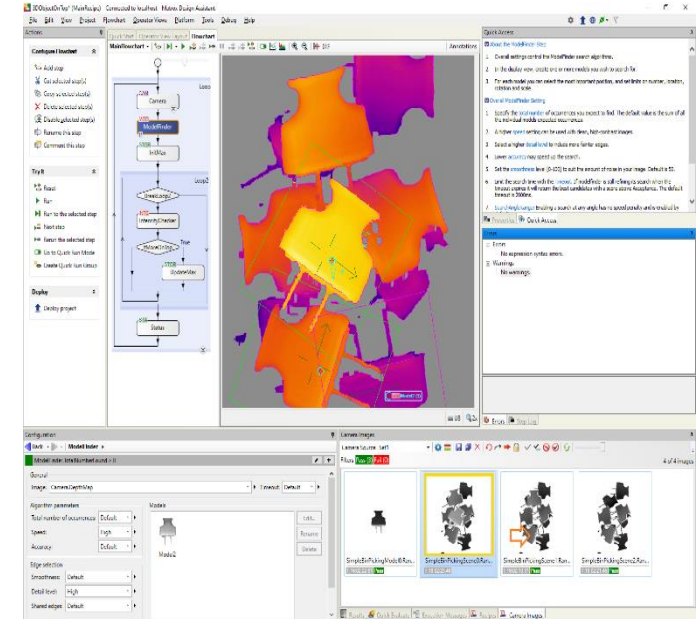2020

Culture

Who we are

What we do

How we do it

MATROX IMAGING

The Matrox Imaging Advantage

Assured quality and longevity

Trusted industry standards

Comprehensive customer support

Tailored customer support

Long-standing global network

MATROX IMAGING

Matrox Imaging Milestones

Matrox Electronic Systems GmbH founded

MIL
1993

Matrox 4Sight
1999

Matrox 4Sight GPm
Matrox Supersight Solo
2013

MIL celebrates 25 years

Matrox America Corporation founded

Matrox Concord PoE

Matrox Rapixo CXP
2018

Matrox® founded
1976

PIP-512
1985

Meteor-II
Matrox Europe Ltd founded
1997

IMAGE Series
1989

Matrox Supersight
Matrox Radient
2009

Matrox Radient eV-CXP
2011

Matrox celebrates 40 years
Matrox Iris GTR
Matrox Clarity UHD
2016

Matrox AltiZ
Matrox Supersight Quad
2020

1976	1980s	1990s	2000s	2010s	Present

1982
RGB-GRAPH

1988
Matrox VITE Ltd founded

2004
Matrox Iris

2010
Matrox Orion

2019
Matrox Supersight Uno
Matrox 4Sight XV6

1977
Matrox International Corp founded

1986
MVP-AT

1996
Genesis

1998
Matrox Asia Ltd founded

2008
Matrox Iris GT

2012
Matrox 4Sight GP

2014
Matrox Design Assistant
Matrox RadientPro
Matrox Radient eV-CL
Matrox FDK

MATROX IMAGING

Presence

Dorval, Canada

Middlesex, United Kingdom

Unterhaching, Germany

Champlain, United States

Cork, Ireland

Hong Kong, China

Our worldwide network covers over 111 sites

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Organizations & Standards

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Patents

- Matrox Imaging is focused on distinctive innovation
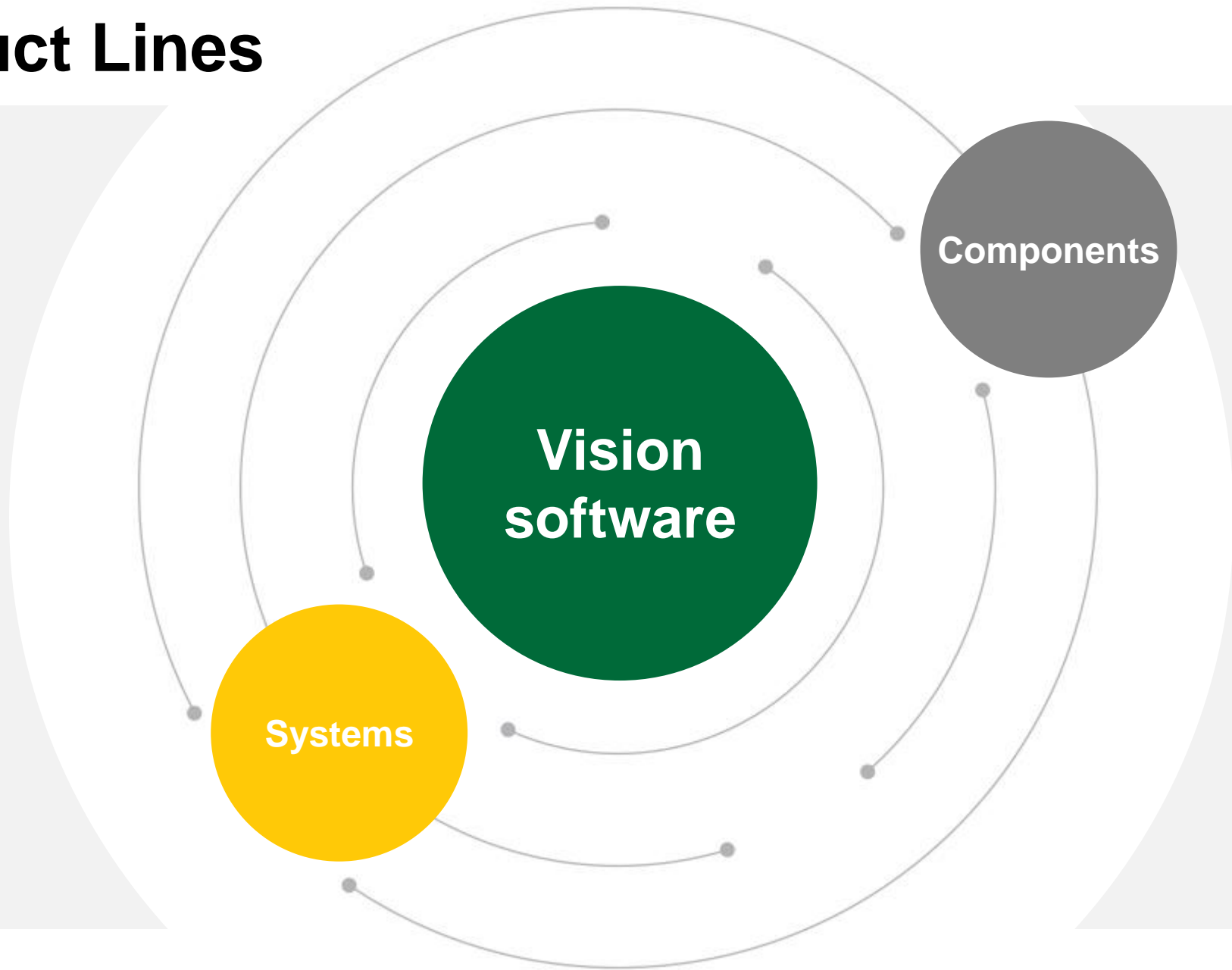- The patent portfolio is a reflection of our original workmanship and creative spirit

www.matrox.com/ corporate/en/legal/patents/

MATROX IMAGING

Third-Party Interfacing

Product Lines

Product Lines

Frame grabbers

Smart cameras

3D profile sensors

Software development kit (SDK) + FDK

Integrated development environment (IDE)

I/O cards

Vision controllers
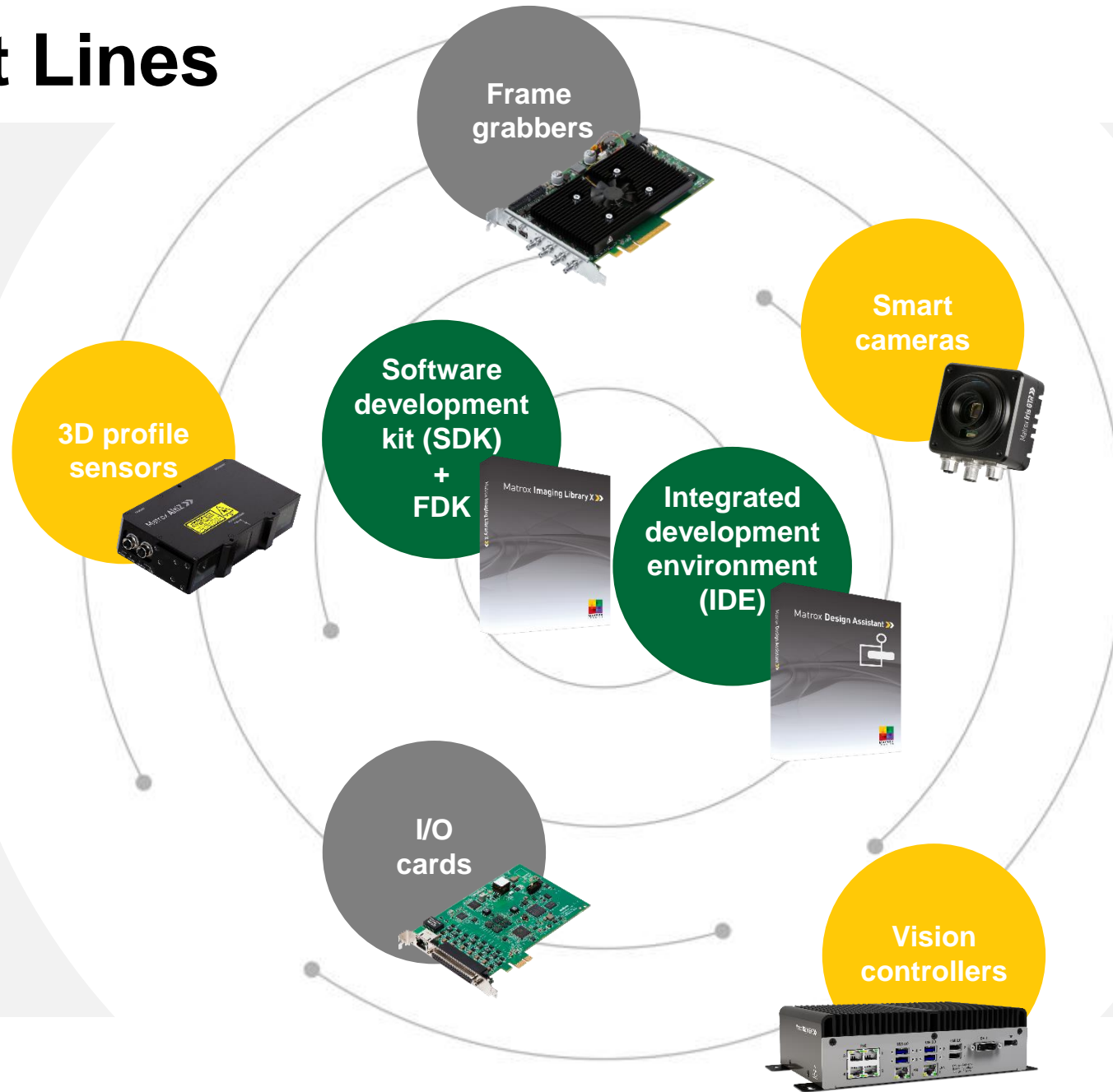
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Product Lines

Software

Systems

Components

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Matrox Imaging Library (MIL)

- Comprehensive, hardware-independent SDK for developing machine vision applications

- Includes tools for every step in the process, from application feasibility to prototyping, development, and ultimately deployment

- Proven, 25+ year track record of reducing the time and effort to bring solutions to market
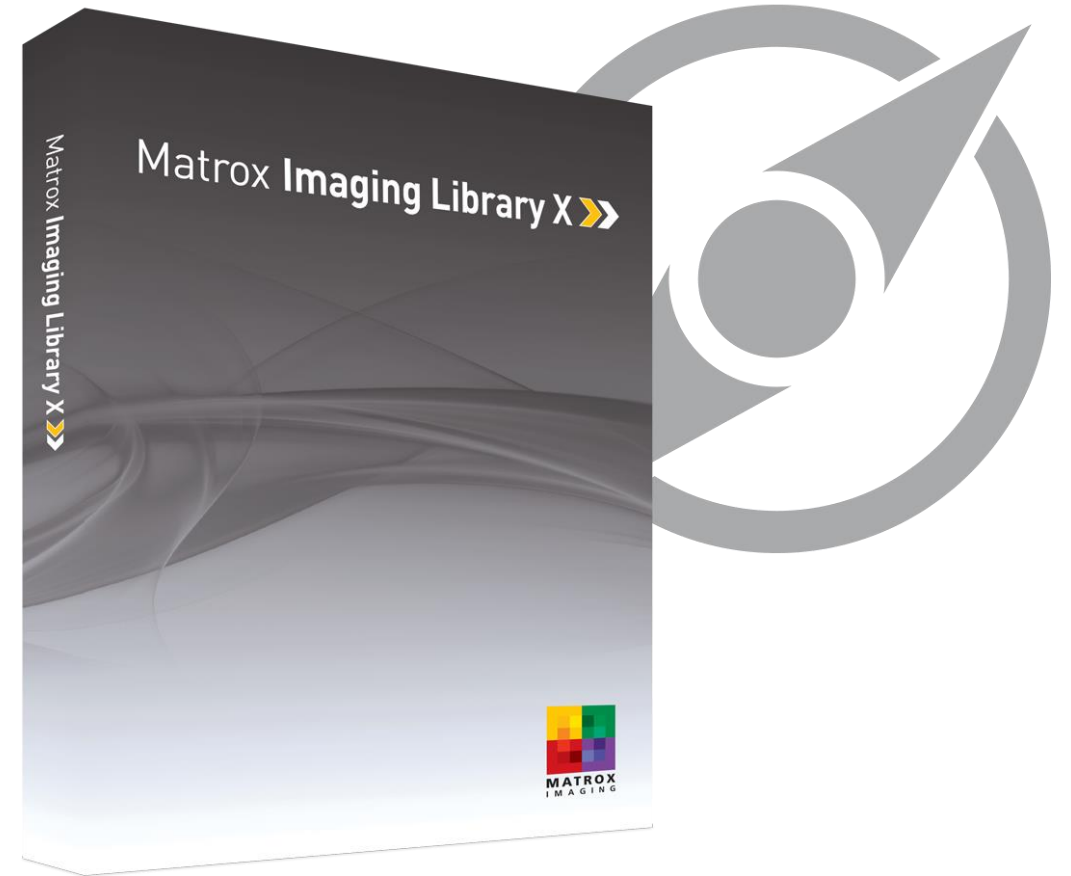
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Matrox Imaging Library (MIL)

- Support for analog, Camera Link, CoaXPress, GigE Vision, DisplayPort, HDMI, SDI, and USB3 Vision interfaces

- Program in C/C++, C#, CPython, and Visual Basic languages

- 32-/64-bit Windows and Linux

- Prototype and generate code using MIL CoPilot utility

- Analyze execution performance with Matrox Profiler utility
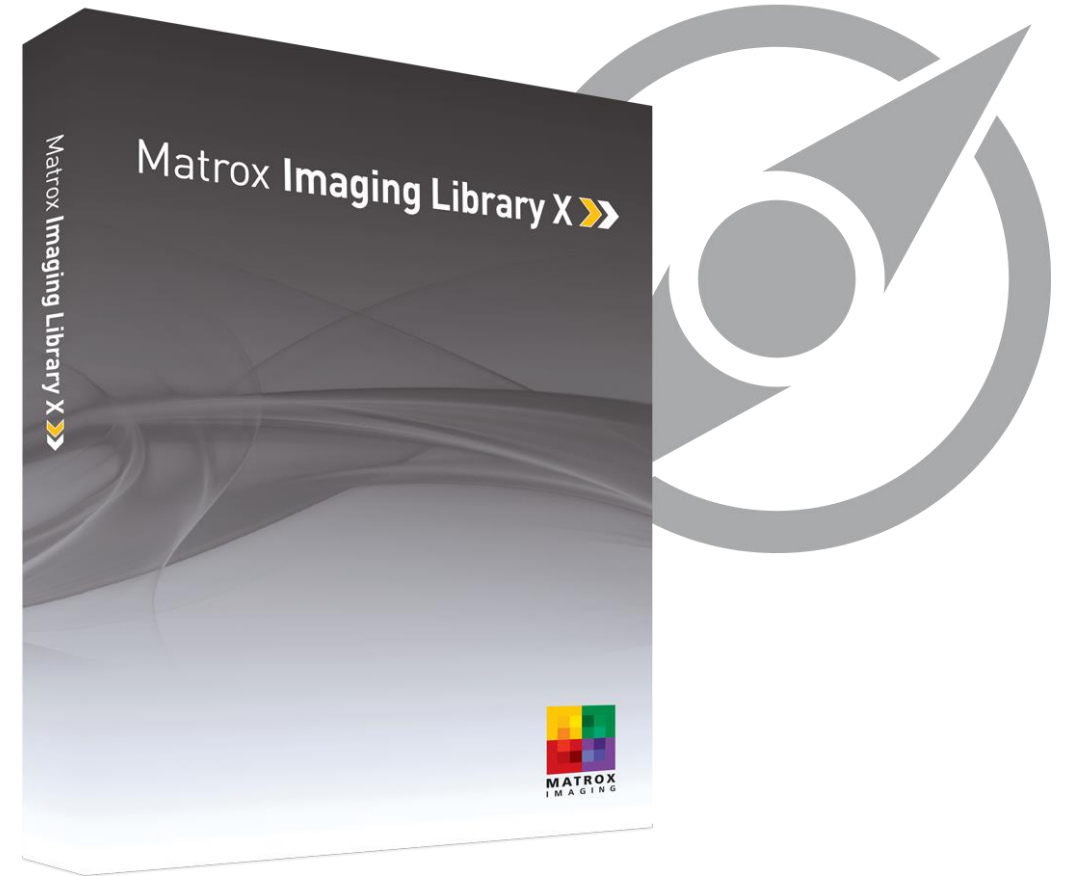
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Matrox Design Assistant

- Powerful, flowchart-based IDE for developing machine vision applications

- Intuitive flowchart eliminates need to write program code

- Based on MIL software

- IDE runs on Windows

- Projects deploy to Matrox Imaging smart camera or vision controller or third-party PC

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Matrox Design Assistant

- Execute multiple independent projects simultaneously on applicable platforms

- Communicate actions and results to other equipment using industrial and IT protocols

- Analyze execution performance with Matrox Profiler utility

- Protect against unwanted changes with Project Change Validator utility

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Registered Users

- All registered users eligible for software maintenance, giving access to:
  - Technical support
  - Software updates
  - Matrox Vision Academy online training
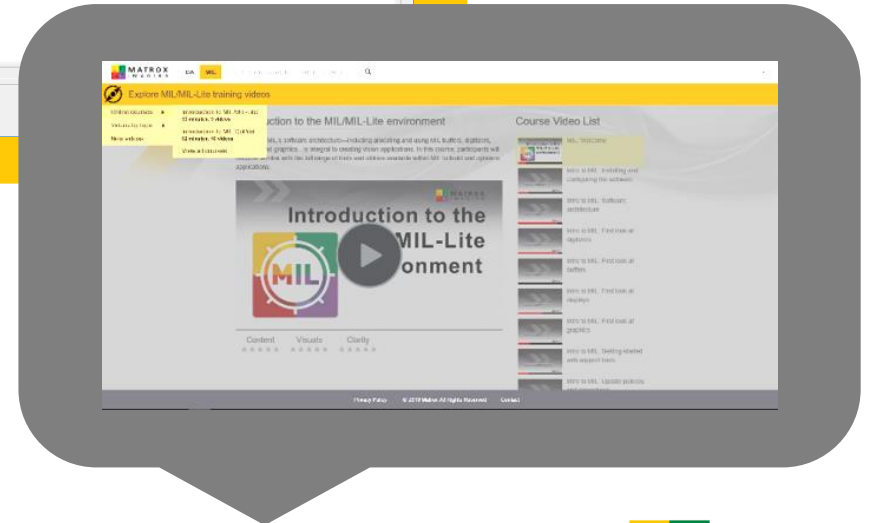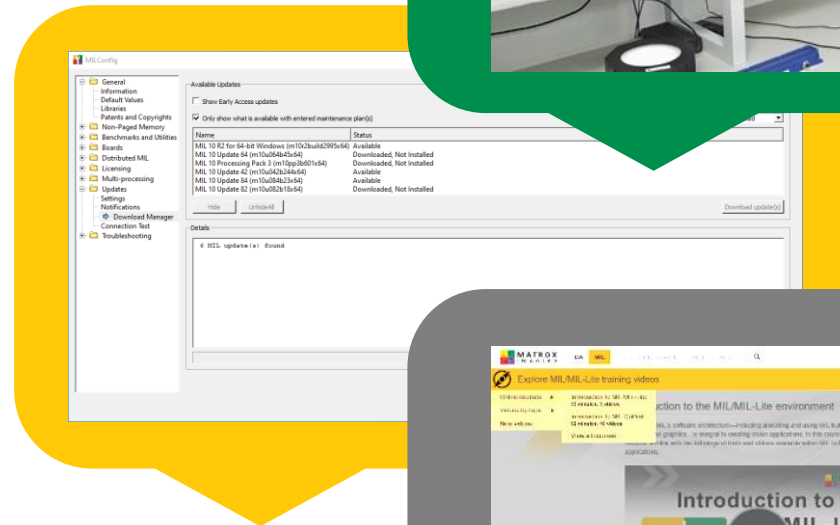
Matrox Vision Academy Training

- On-demand training resource for MIL and Matrox Design Assistant

- Categorized instructional videos and courses

- Available to customers with MIL or Matrox Design Assistant maintenance subscriptions

- Also regularly scheduled live classroom training at Matrox Imaging headquarters

www.matrox.com/imaging/ vision_academy/

Smart Cameras

- Fast image sensing, efficient embedded processing, and comprehensive I/O capabilities create an effective all-in-one system
- Rugged IP67-rated design
- Integrated lens focusing and illumination intensity control

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3D Profile Sensors

- Dual-camera single-laser design for higher fidelity

- Unique embedded algorithms for added reproduction quality

- Standard GigE Vision for 3D software interface

- Discrete I/Os for synchronizing to external and companion devices

- IP67-rated design

- Award-winning, innovative design

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Vision Controllers

- Industrial PCs tailored to machine vision applications
- Direct support for GigE Vision with Power-over-Ethernet or through add-in cards
- Support for USB3 Vision on select models
- Direct support for real-time I/Os or through an add-in card
- Expand connectivity using Matrox Imaging frame grabbers with select models

Frame Grabbers

- Support for SD, HD, non-standard analog, Camera Link, CoaXPress, GigE, DisplayPort, HDMI, and SDI interfaces

- Most comprehensive line-up of high-quality frame grabbers available on the market

- Offload image processing on select boards
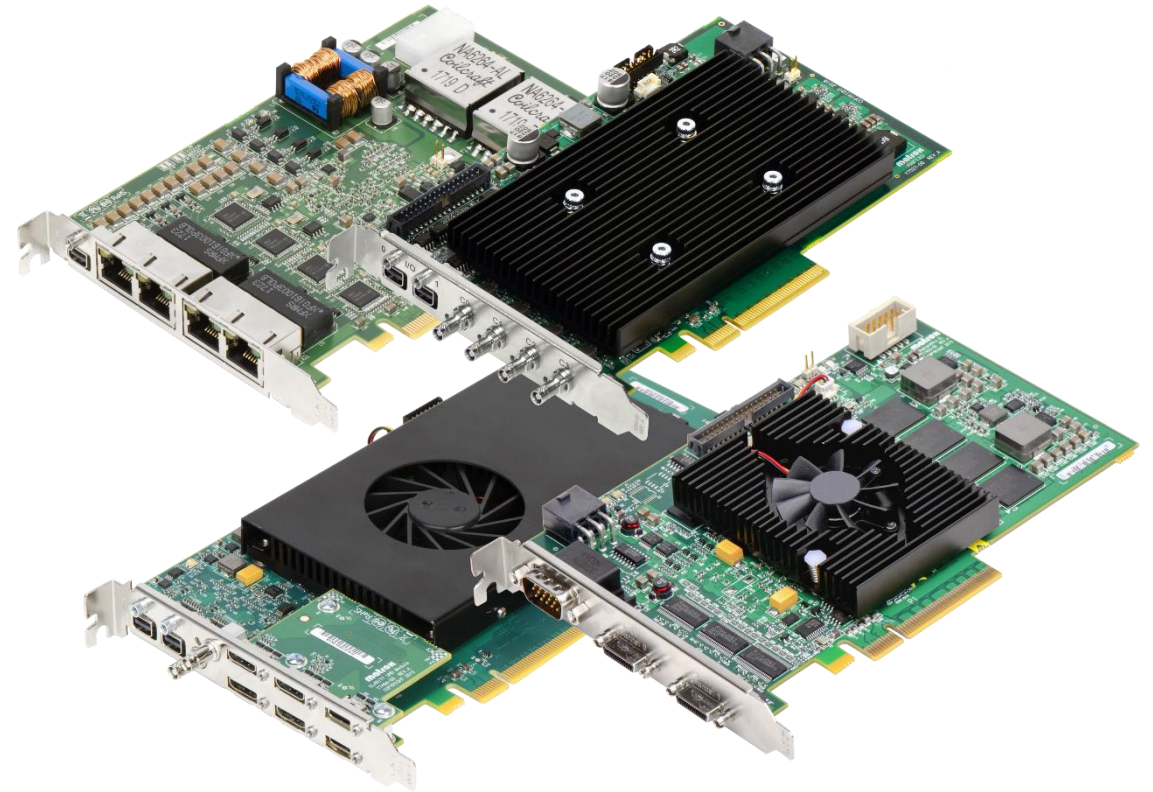
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I/O Cards

- Add-on communication capabilities that turn any PC running Matrox Imaging software into a genuine vision controller

- Hardware-managed real-time synchronization of vision applications with automation devices

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Matrox Professional Services

- Personalized remote or in-person training

- Assessing application or project feasibility

- Demonstrating and/or prototyping applications and projects

- Optimizing and/or troubleshooting user applications and projects, including remote debugging

- Video and camera interfacing

www.matrox.com/imaging/en/ products/Professional-Services/

Matrox Imaging Presence & Experience

Applications

Industry presence

Customer success stories

MATROX IMAGING

Applications

Image processing and analysis

Image and video capture

Machine and robot guidance

Visual inspection and measurement

ID mark reading and verification

3D tools for capture, display, processing, and analysis
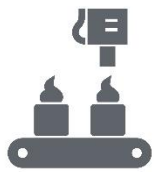
Deep-learning-based image classification

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Industries

Automotive manufacturing

Electronics manufacturing

Flat panel display manufacturing

Food & beverage production

Logistics

Medical device manufacturing

Medical imaging

Packaging

Pharmaceutical production
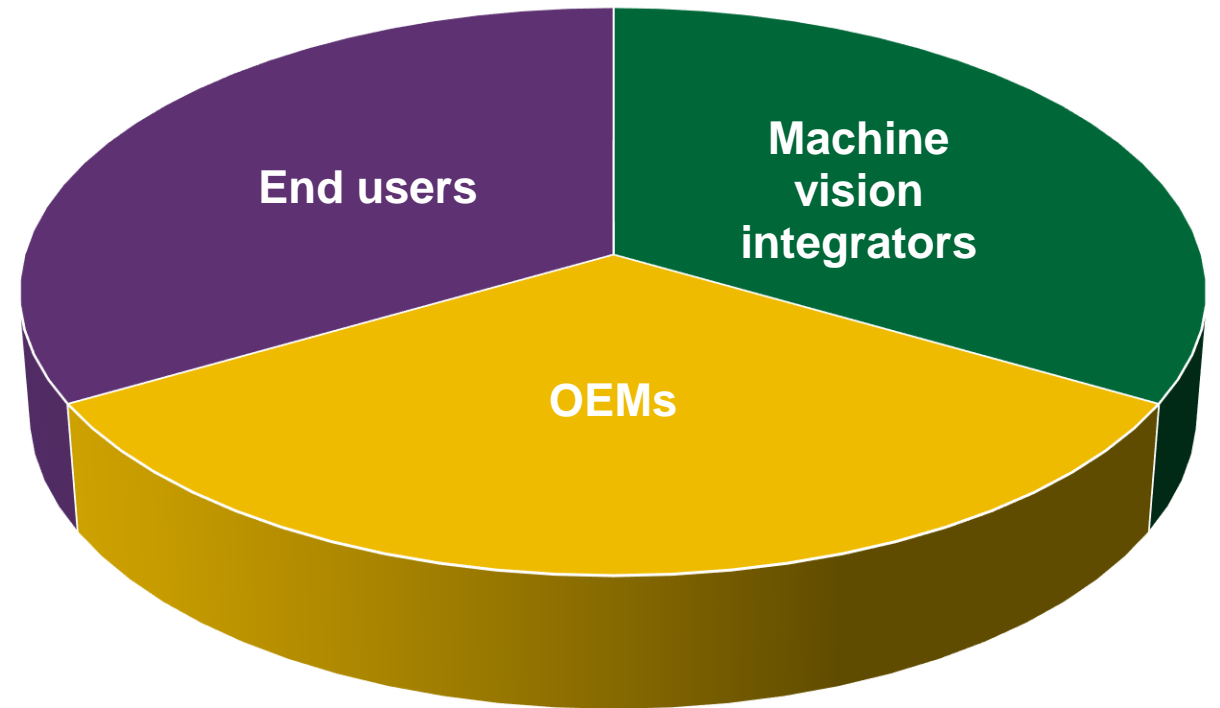
Semiconductor manufacturing

Surveillance

Transportation

MATROX IMAGING

Industry Experience

Matrox Imaging's comprehensive portfolio of hardware and software products provide flexible, modular building blocks that vendors can customize and package into specialized solutions for end-users across a range of industries

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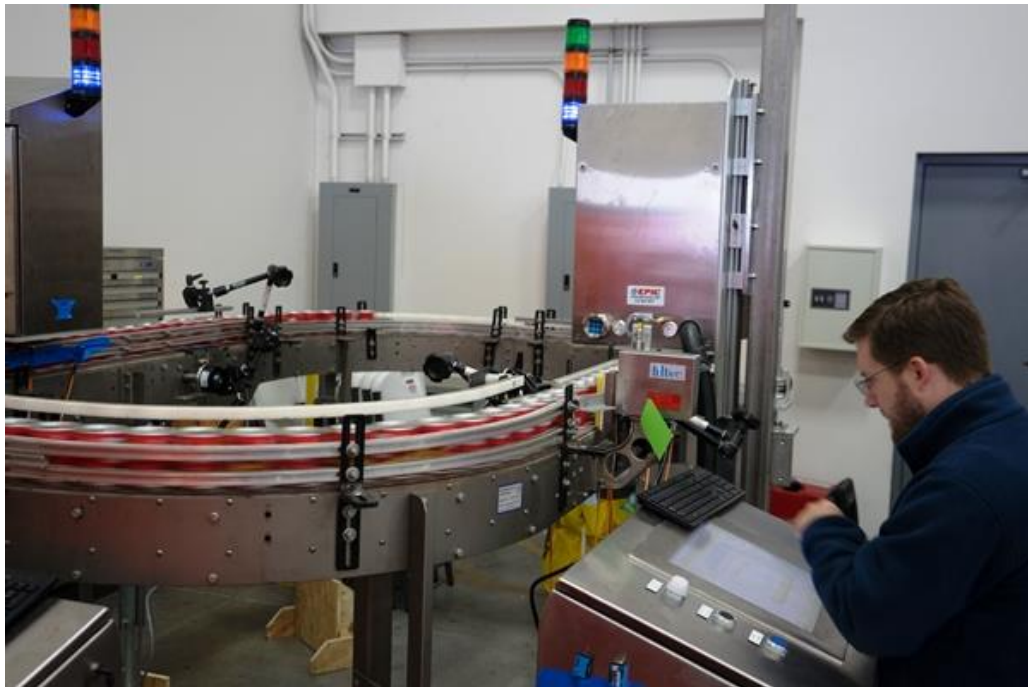
Automotive Manufacturing

Challenge

- High cost of manual assembly
- Likelihood of human error
- Quality assurance

Solution

- Matrox Imaging smart camera
- Matrox Design Assistant software
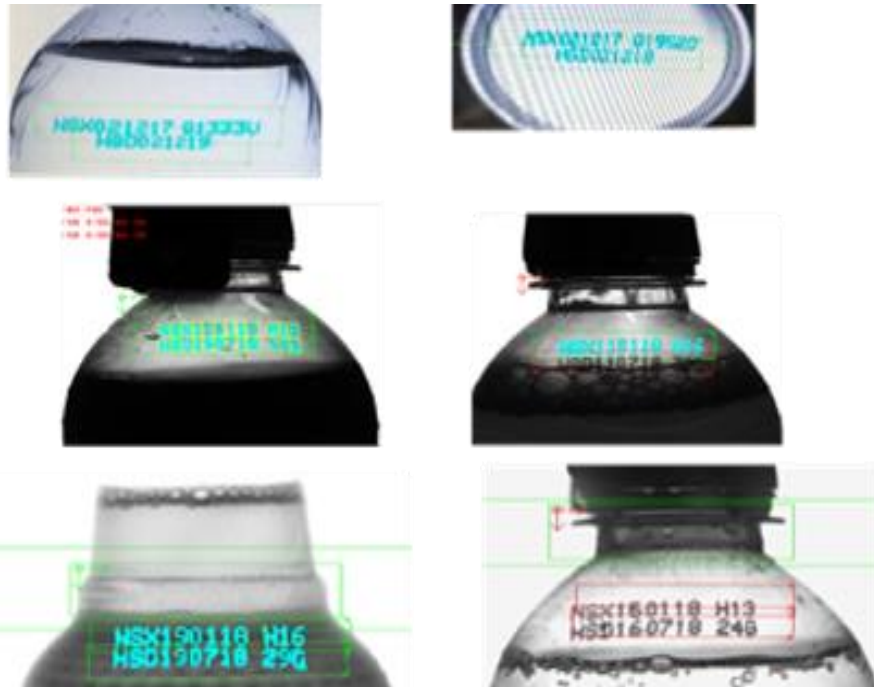
Food & Beverage Production

Challenge

- Quality assurance at high volume and high speed
- Incorrectly printed data codes

Solution

- Matrox SureDotOCR®
- Matrox Indio I/O card
- MIL software

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Food & Beverage Production

Suntory PepsiCo Vietnam Beverage

Challenge

- Many types of products, each with different sizes, properties, components
- Code reading of inconsistent inkjet printing

Solution

- Matrox Design Assistant software
- Matrox Imaging vision controller

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Electronics Manufacturing

Challenge

- Sorting micro-assembly components
- Items highly sensitive to electrostatic charge
- Quality assurance

Solution

- MIL software

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Logistics

Challenge

- No space for PC-based system
- Likelihood of human error
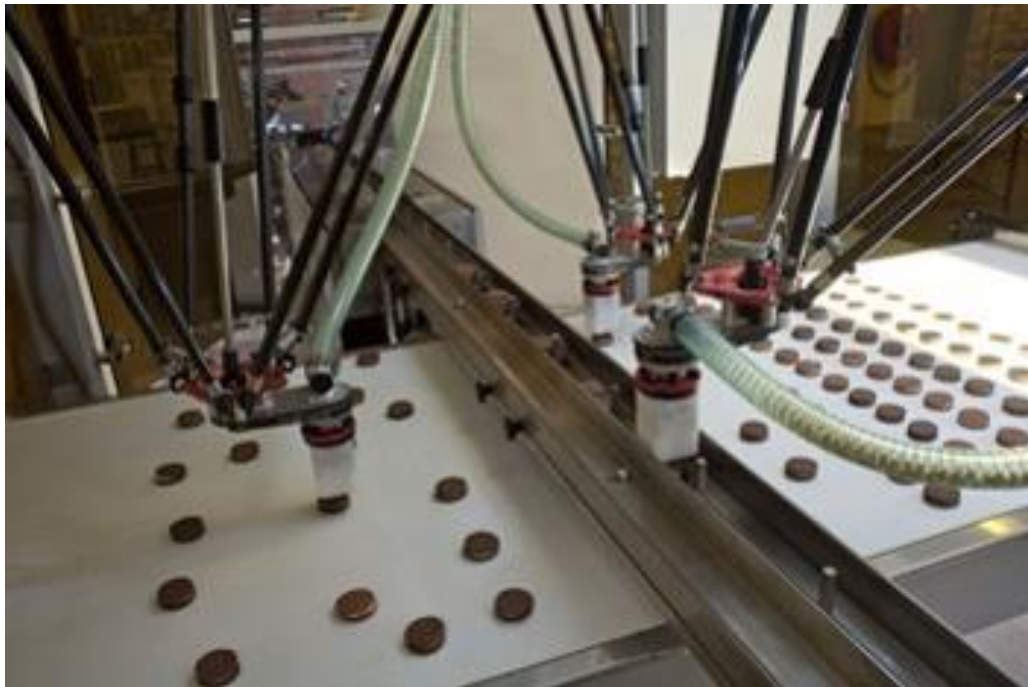- Need for automated sensing and control systems in machinery

Solution

- Matrox Design Assistant software
- Matrox Imaging smart camera

Packaging

Challenge

- Wide variety of products
- High throughput
- Vision-guided delta robot performing pick-and-place
- Quality assurance

Solution

- MIL software

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Pharmaceutical Production

Challenge

- Inspection of granules and powders
- Detecting and separating foreign materials from raw materials
- Track-and-trace

Solution

- MIL software
- Matrox Imaging vision controller

Surveillance

Challenge

- Automated verification of machine readable travel documents
- Automated data capture
- Near-perfect accuracy rates

Solution

- MIL software

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Transportation

Challenge

- Parking enforcement in large city
- Managing ticketing distribution
- License plate recognition
- Inclement weather impacting readings

Solution

- MIL software

matrox.com/ imaging

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