BENCHMARK

Imaging? Get started with the
Benchmark Imaging Solution

Benchmark offers a powerful but affordable imaging solution based on Matrox Imaging products to get started with imaging. Compact and versatile, it imparts imaging concepts based on real world applications.

Additionally, it provides a complete and easy-to-use programming library for image capture, processing, analysis, display and archiving.
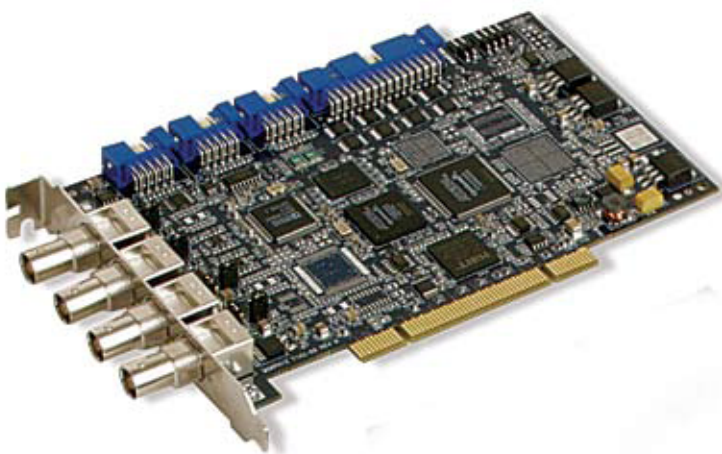
The Benchmark Imaging Solution comprises the following:
1. Image Capture Card
2. Camera
3. Illuminator / Lighting
4. Imaging Software

The Solution is ideal for imparting learning in real world applications such as Education, Image Analysis, Machine Vision, Medical Imaging, Surveillance / Security and Video Analytics.

Image Capture Card

The Matrox Morphis is a cost effective frame grabber card capable of capture from multiple, standard video sources.

Key Features
➔   Image capture board for PCI/PCI-X/PCIe slot
➔   Captures from colour and monochrome sources
➔   Supports NTSC, PAL, RS-170 and CCIR standards
➔   Supports two composite video inputs
➔   Two TTL trigger inputs
➔   Compatible with Microsoft® Windows® 2000, Windows® XP & Windows Vista
➔   On board JPEG2000 accelerator (optional)

Camera

This camera is well equipped with outstanding features such as back light compensation, AGC and Gamma correction.

Key Features
➔   CCD Monochrome Camera
➔   Resolution 752 (h) x 582(v)
➔   Composite Video Output
➔   CS-Mount
➔   Operates at 12 VDC
➔   With Auto-Iris features

Illuminator / Lighting

High Intensity Illuminator
Rheostat controlled high intensity quartz halogen illuminators designed for microscopy, lab and workstation applications. Miniature 20W MR-11 halogen illuminator provides excellent colour rendition.

Each lamp assembly is mounted on an all-angle swivel at the end of a 12" flexible gooseneck arm. On/off switch, rheostat intensity control, 8 foot 120V AC main power cord.

Imaging Software

Matrox Imaging Library (MIL)
MIL is a comprehensive collection of software tools for developing industrial imaging applications. MIL includes tools for every step in the process: from application feasibility, to prototyping, through to development and ultimately deployment.

The toolkit features interactive software and programming functions for image capture, processing, analysis, annotation, display and archiving. MIL tools are used to put together solutions for the agricultural, aerospace, automotive, beverage, consumer, construction material, cosmetic,
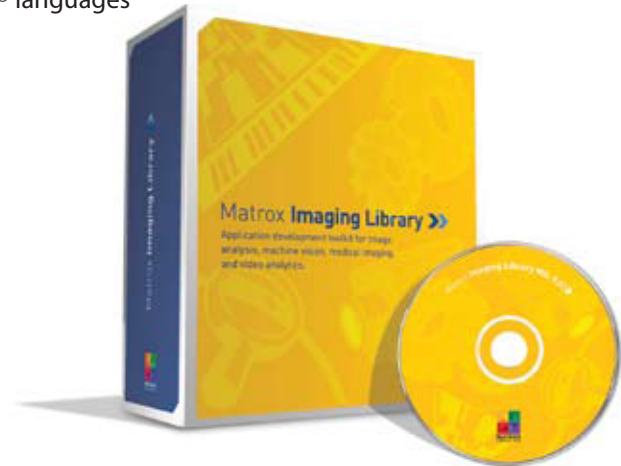
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electronic, food, flat panel display, freight, machining, medical device, medical diagnostic, paper, packaging, pharmaceutical, printing, resource, security, semiconductor, shipping, textile, and transportation industries.

Key Features

➔ Matrox Imaging Library (MIL) is a application development toolkit for image analysis, machine vision, medical imaging, and video analytics

➔ MIL includes **Matrox Inspector**, an integrated imaging environment (GUI) for Windows. Matrox Inspector presents processing and analysis results as tables and / or graphs, including trend and distribution, which are useful for tuning operation settings. Easy to use interface with point & click access to MIL image capture, processing, analysis and archiving operations

➔ Field proven tools for:
Pattern recognition, feature extraction and analysis, 1D and 2D measurements, colour analysis, character recognition, 1D & 2D code reading and verification, registration, 2D calibration, 3D calibration and reconstruction, compression / decompression & speed optimization for multi-core CPU / multi CPU architectures

➔ Image Processing / Analyzing Operations:
Calibration, Convert, Extract Band, Statistics, Processing (Arithmetic & Logical, Filter, IIR Filters, Morphology, Mapping, Threshold, Watershed), Geometry, Fourier Transform, ROI, Pattern Matching, Geometric Model Finder(GMF), Blob Analysis, Edge Finder, Measurement, Metrology, OCR, String Reader and Code Reader

➔ Harness the full power of today's hardware through optimizations exploiting SIMD, multi-core CPU, multi CPU, GPU and FPGA technologies

➔ Tackle applications with utmost confidence using field-proven tools for analyzing, locating, measuring, reading and verifying

➔ Obtain live images from the interface of choice through support for analog, Camera Link®, GigE Vision™, IEEE 1394 IIDC2, and RS-422/LVDS transmission formats

➔ Compatible with Microsoft® Windows® 2000, Windows® XP & Windows Vista and supports C, C++, C# and Visual Basic® languages

MIL-Lite
Matrox Imaging Library (MIL-Lite) is a high-level programming library with an extensive set of optimised functions for image capture, display and archiving.

Key Features

➔ Supports TIF, BMP, AVI and raw file formats
➔ Includes Matrox Intellicam camera configuration utility
➔ Supports C, C++, C# and Visual Basic Languages
➔ Compatible with Microsoft® Windows® 2000, Windows® XP & Windows Vista

* MIL & MIL-Lite for Linux also available

Ordering Information

BIS01
Morphis 2VD Frame Grabber card or equivalent with Camera, Lens, Power adapter, Camera stand, Camera Interface Cable, High Intensity Illuminator (Lighting), MIL Development Toolkit with Matrox Inspector and User Guide/ Documentation

BIS02
Morphis 2VD Frame Grabber Card or equivalent with Camera, Lens, Power adapter, Camera stand, Camera Interface Cable, MIL-Lite Software and User Guide/ Documentation

* Specifications are subjected to change without notice

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ELECTRONIC SYSTEMS

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