microEnable 5

marathon ACL/VCL

...for most Established Machine Vision Standard
with Outstanding Price-/Performance Ratio

What you need to know:

- Frame grabber series with Camera Link interface - compliant with Camera Link standard 2.0
- Extended cable length
- Plug ‚n' Plug real-time image and signal processing
- A-Series with comprehensive set of on-board image processing functions: LUT, ROI, De-Bayering, shading correction, noise filter and more in pre-defined configurations
- Front GPIO (opto-isolated, 4,5–28V), TTL outputs for control, communication and synchronization
- Internal GPIO – interface with support for add-on GPIO board (requires additional slot)
- 100% compliant with Silicon Software SDK and GUI control and service tools
- Third-Party Vision tool interface: Halcon, Common Vision Blox and others
- marathon VCL with custom FPGA programming by VisualApplets supporting Xilinx Kintex FPGAs

Please note: microEnable 5 marathon ACL is not available now - coming soon!

Technical Specification:

Camera Interface
- Camera Link 2.0, GenICam GenTL
- Base, DualBase, Medium, Full, Deca modes
- PoCL SafePower, 4Watt/cable
- PixelClock: up to 85 MHz
- Extended cable length
- Camera Connection: 2x SDR Connectors
- Test Environment: Camera Simulator

Onboard Memory
- marathon ACL : 512 MByte DDR3-RAM
- marathon VCL: 2 GByte DDR3-RAM

V-Series Vision Processor (marathon VCL)
- Xilinx Kintex 7 XC7K160T

Host Interface (DMA1800)
- PCIe x4, Gen2 (Direct Memory Access)
- Up to 1800 MB/s sustainable data bandwidth

Physical and Environmental Properties
- PCIe standard height, half length card: 167.64 mm length x 111.15 mm height
- Operating temperature: 0° to 50°, fanless
- Requires one x4 Gen2 PCIe slot
- ROHS, CE pending

Controls and General-Purpose I/Os
Internal GPIO Interface (for connection with trigger boards)
- 8 opto-coupled inputs (4,5-28V), optional 4 opto-coupled differential inputs (RS422)
- 8 opto-coupled outputs (4,5-28V)
- Shaft encoder input, programmable rescaler, multiple-camera synchronization

Front-GPIO (HD SubD15 connector)
- 2 opto-coupled differential inputs (RS422) and 1 opto-coupled differential / single ended input; optional (conf.): 4 opto-coupled Inputs (4,5-28V) with up to 1 MHz frequency
- 2 TTL outputs, up to 20 MHz frequency
- Shaft encoder input, programmable rescaler
- Multiple-camera synchronization

Software
- Windows 7 & 8 and Linux for 32/64bit
- Image acquisition control and viewer tool
- Camera control tool (GenICam)
- Service tool (test and firmware updates)
- Software API: SDK (C/C++ projects, .net interface)
- Vision tool interfaces: Halcon, CVB, VisionPro, Labview, MIL, others on request
- FPGA programming (marathon VCL) with VisualApplets

Current Availability
- microEnable 5 marathon VCL