

Suitable for LVDS

Area Scan Cameras



Linux Available

High performance Embedded Vision System

FEATURES

- Stand alone complete vision system
- Performance equivalent to 4 GHz. Pentium
- Fully IP addressable, Fast Ethernet interface
- Up to 4 LVDS independent channels
- Camera resolution up to 1024 x 768 pixels
- Optimized vision library TIL
- Open system to port your own C Application
- Intuitive graphical development environment
- Available in 3 models: base, w/encoder
- Secure Digital removable storage media
- Very low power consumption

Typical Applications

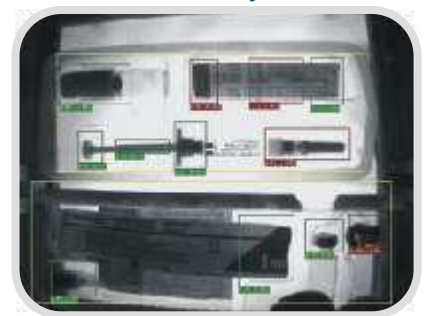
OCR/OCV



Inspection



Blob Analysis



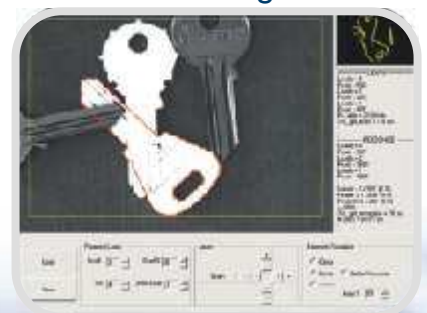
Color Analysis



Surface Inspections



Pattern Recognition



SOFTWARE FEATURES	
OPERATING SYSTEM	
Proprietary Tattile O.S. – TOS	Multitask Operating System for custom application
Linux	Real time Linux embedded
PROGRAMMING LANGUAGES	
Antares Explorer	Intuitive graphical development environment with optimized vision library
Ansi C	Standard C environment
ARM Assembler	ARM Assembler environment
COMMUNICATION	
Firmware Update	Updatable via Ethernet or serial ports
Data Exchange	TCP/IP, UDP/IP, RS-232 or RS-485
CUSTOMIZING TOOLS	
Custom Tool	Ability to add custom C functions to the standard Antares development environment with direct access to TIL (Tattile Image Library)
Custom Program	You can write a complete new C application program
Software Porting	Software team to support the porting of your new or existing applications



TECHNICAL FEATURES	
SYSTEM	
Microprocessor	Intel® XScale® @ 733 MHz
Analysis	Up to 60 Fps
Synchronization	External trigger without delay
Software	Antares engine, PQC – Print Quality Control or custom C program
DIGITAL CAMERA	
Input Camera	4 LVDS standard ports
Sensor/Acquisition	BW or Color CCD, Progressive scan
Resolution	640 x 480 (VGA) or 1024 x 768 (XVGA) pixels
Frame rate	60fps @ VGA ; 24fps @ XVGA
DIGITAL I/O	
Input	6 PNP optoisolated inputs 24 Vdc 20 mA
Output	4 PNP optoisolated outputs 24 Vdc 500 mA
Strobe Output	2 Outputs open collector, strobe timing max 10 ms.
Encoder Inputs (only for M5 w/e)	1 encoder +1 optional (A,B,Z) line Driver 5Vdc Zero Reference: Optional
M5 w/expansion	8 optoisolated outputs PNP 24 Vdc 500 mA 8 optoisolated power digital outputs PNP 24 Vdc 1 A
M5 w/expansion v2	12 optoisolated outputs PNP 24 Vdc 500 mA 10 optoisolated power digital outputs PNP 24 Vdc 1 A
COMMUNICATION	
Ethernet 10/100 Mbps	TCP, UDP, FTP, HTTP
RS 232	1 line baud rate 1200:115200
RS 485	1 line half duplex baud rate 1200:115200
SD Interface	Supports all mass memories (transfer rate 1 MB/s)
ENVIRONMENTAL	
Operating Temp.	-10° to 50°C
Operating Humid.	10 to 90% non cond.
Storage Temp.	-20° to 65°C
Storage Humidity	10 to 90% non cond.
Power Supply	12 to 35 Vdc ± 5% 8,5 W
Package body	Anodized aluminium
Size / Weight	M5: 156 x 34 x 215 mm (L x H x W) - 1200g M5w exp. : 156 x 53 x 215 mm (L x H x W) - 1300g M5w exp. v2: 156 x 53 x 215 mm (L x H x W) - 1500g
Protection level	IP 42



Smart Reader M5 with extension - Connectors side



Multitasking
O.S. On Board



Programming
Language



Smart Reader M5 standard - Camera LVDS connectors