

Messen
 Prüfen
 Kontrollieren
 Sortieren
 Positionieren
 Vollständigkeitskontrolle
 Vorhandenseinskontrolle
 Oberflächeninspektion
 Teileprüfung
 Werkzeugvoreinstellung
 3D Sehen
 3D Erkennung
 Robot Vision
 Markierungskontrolle
 Koplanarität
 BGA-Prüfung
 Konturprüfung
 Fehler- und Verschmutzungserkennung
 OCR / OCV
 Zeichenerkennung
 Code Lesen
 Faden- und Stoffprüfung
 Papier- und Folienprüfung
 Metallprüfung
 Displayprüfung LCD, LED, OLED
 Mustervergleich
 Blasenkontrolle
 Robotersteuerung
 Bohrer Vermessung
 Thermografie
 Plastik-Inspektion
 2D

Product data:

EmSens BarCode

MACHINE VISION SYSTEM



Description:

With the „BarCode“ command differen codes can be read, such as e.g.:

- 2/5 Interleaved and Code 39 or
- EAN 13, EAN 8, Code 128 etc.

In addition the quality of the code is evaluated and the characteristics determined.

The EmSens BarCode Reader also has commands for image capture and overlay display.

For more information visit our website: www.evt-web.com.

Or contact us if you have any questions: **+49 (0) 721 668 004 23**

und vieles mehr...



Camera Models Basler ace

Model	Resolution	Sensor	Frame Rate	Interface
Basler acA800-200gm	800 x 600	1/3.6" monochrome	240 fps	Gigabit Ethernet
Basler acA1440-73gm	1440 x 1080	1/2.9" monochrome	73 fps	Gigabit Ethernet
Basler acA1600-60gm	1600 x 1200	1/1.8" monochrome	60 fps	Gigabit Ethernet
Basler acA2440-20gm	2448 x 2048	2/3" monochrome	20 fps	Gigabit Ethernet
Basler acA800-510um	800 x 600	1/3.6" monochrome	511 fps	USB 3.0
Basler acA1440-220um	1440 x 1080	1/2.9" monochrome	220 fps	USB 3.0
Basler acA2440-35um	2448 x 2048	2/3" monochrome	35 fps	USB 3.0
Basler acA800-200gc	800 x 600	1/3.6" color	240 fps	Gigabit Ethernet
Basler acA1440-73gc	1440 x 1080	1/2.9" color	73 fps	Gigabit Ethernet
Basler acA800-510uc	800 x 600	1/3.6" color	511 fps	USB 3.0
Basler acA1440-220uc	1440 x 1080	1/2.9" color	220 fps	USB 3.0
Basler acA2440-35uc	2448 x 2048	2/3" color	35 fps	USB 3.0

Camera Models Basler dart

Model*	Resolution	Sensor	Frame Rate	Interface
Basler daA1280-54um	1280 x 960	1/3" monochrom	54 fps	USB 3.0
Basler daA1600-60um	1600 x 1200	1/1.8" monochrom	60 fps	USB 3.0
Basler daA1920-30um	1920 x 1080	1/3.7" monochrom	30 fps	USB 3.0
Basler daA2500-14um	2590 x 1942	1/2.5" monochrom	14 fps	USB 3.0

* all camera models are also available with color sensor



Computing Hardware

EmSys – Machine Vision Computer

Features

- Intel ATOM SoC E3845 Quad Core 1.91 GHz
- 4G-byte DRAM, 64G-byte storage for operating system
- 64-bit OS: Windows 10 IoT Enterprise, Windows 10 IoT Core, Ubuntu 16.04
- HDMI and VGA Display Ports
- 4 GigE camera ports with PoE+ support
- 4 independent constant current LED driver
- 8 digital Inputs and 8 digital Outputs
- DINrail mount, fanless



Raspberry Pi



Odroid



Command set

	Image Acquisition		Object count BLOB		Script Interpreter		Overlay Arrow
	Asynchronous Image Acquisition		Check Input		Window		Overlay Circle
	Camera Control		Set Output		Rectangular edge detection		Overlay Cross
	Calibration		Display Register Values		Barcode Reader Standard		Overlay Line
	Stop watch		Global String				Overlay Square
	Program Flow Control		Image Transfer				
	Subroutine call		Image Information				
	Value evaluation		Point List				

EyeVision Software

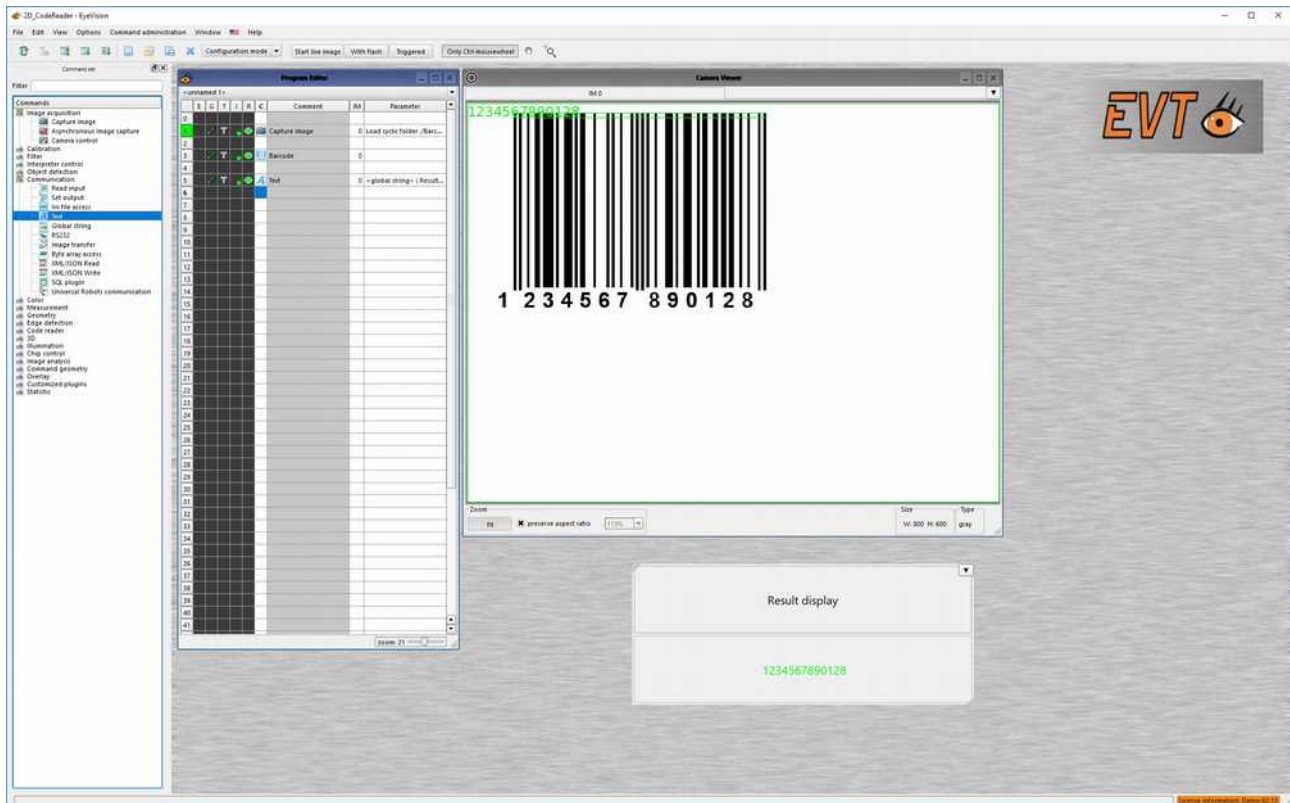
The drag-and-drop software with the graphical user interface.

Every EmSens vision sensor contains the EyeVision software with a specially activated command set (see list above). This command set can be extended with any command out of the EyeVision command range.

The screenshot illustrates the software's workflow. On the left, the 'Command Set' window lists various functions. The 'Barcode' section is expanded, showing options like 'Barcode', 'QR code', and 'DMC Reader'. A blue arrow points from the 'Barcode' icon in this list to the 'Barcode Reader Standard' icon in the 'Program Editor' window. The 'Program Editor' window displays a table of commands for 'Example Position Adjustment V1.dxp':

	E	G	T	I	R	B	Kommentar	IM	Parameter
0									
1	✓	✓	T	✓	✓	✓	Stop watch	0	Reset stop watch
2	✓	✓	T	✓	✓	✓	Reset Point list	0	Reset point list
3	✓	✓	T	✓	✓	✓	Reset calibration	0	Set scaling factors in x 1
4									
5									
6	✓	✓	T	✓	✓	✓	Load images	0	Load file Load image V14
7	✓	✓	T	✓	✓	✓	copy IM1	0	Window: 0.0000 / 0.00
8	✓	✓	T	✓	✓	✓	binarize	1	Window: 211.0000 / 150
9									
10	✓	✓	T	✓	✓	✓	copy IM2	0	Window: 0.0000 / 0.00
11	✓	✓	T	✓	✓	✓	blob IM 2	2	lower Threshold: 17Hupf
12									
13	✓	✓	T	✓	✓	✓	Mark Position adjustment	0	Mark Position adjustment
14	✓	✓	T	✓	✓	✓	Find object		
15	✓	✓	T	✓	✓	✓	Jump if NOT	0	Jump to Wrong number
17									
18									
19	✓	✓	T	✓	✓	✓	Calibration	0	Define origin (Only x and y)
20									
21									
22	✓	✓	T	✓	✓	✓	Mark Diameter 1	0	Mark Diameter 1
23	✓	✓	T	✓	✓	✓	Reset Point list	0	Reset point list
24	✓	✓	T	✓	✓	✓	Probe points(Circle probe)	0	-11.9125/2.5000 R: 8.11
25	✓	✓	T	✓	✓	✓	Circle	0	Best fitting circle (Least I
26	✓	✓	T	✓	✓	✓	Evaluate diameter 1	0	Register index to be eva
27	✓	✓	T	✓	✓	✓	Show result	0	Index: Position: 261/61
28									
29									

On the right, a grayscale image of a barcode is shown with the text 'EAN 13' above it and the numbers '487577' and '112850' below the bars. A blue arrow points from the 'Barcode Reader Standard' icon in the 'Program Editor' to this image.



EmSens Configuration Mode: bar code reading

Further EmSens Vision Sensors:

- EmSens ColorInspect
- EmSens OCR Reader
- EmSens Measure
- EmSens DMC
- EmSens Match
- EmSens Object Count