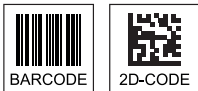
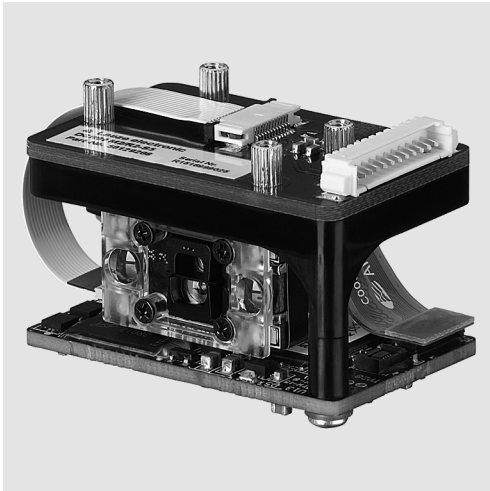


DCR80

CMOS Imager Scan Engine with Integrated Decoder

en 01-2015/06 50129708



20 ... 300mm

- CMOS imager scan engine for all common 1D and 2D codes
- Excellent reading and decoding features
- Very small construction
- Integrated decoder
- RS232 interfaces
- Operating temperature 0°C ...+50°C

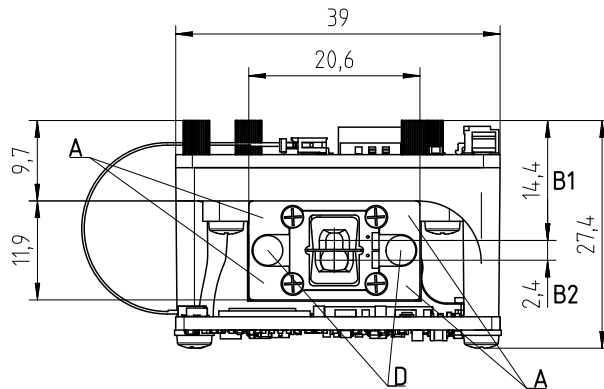


Accessories:

(available separately)

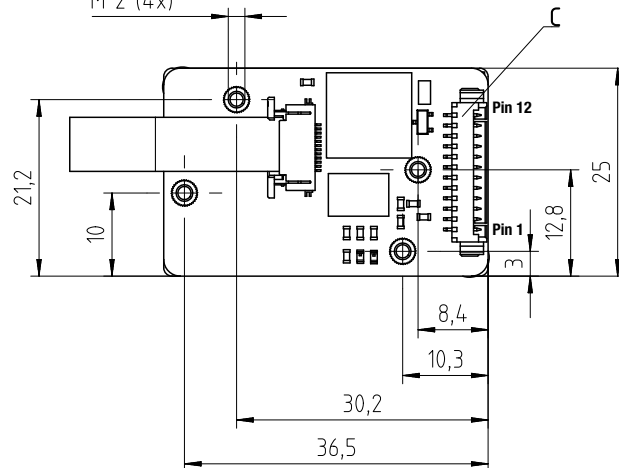
- Adapter board with ribbon cable and connector strip for contacting the 12-pin connector and implementation at SUB-D, 9-pin (MA-CR)

Dimensioned drawing



Threaded inserts for mounting

M 2 (4x)



- A** 4 integrated LEDs for illumination (red light)
- B1** Wide range read field lens
- B2** High resolution read field lens
- C** Connector Molex (53398-1271), 12-pin
- D** 2 integrated target LEDs (blue light)

Electrical connection

Molex 53398-1271, 12-pin

Pin No.	Signal	IN / OUT
1	+5VDC Power	IN
2	GND	IN
3	BUZZER	OUT
4	SWITCHING OUTPUT	OUT
5	TRIGGER	IN
6	RS232 - RxD	IN
7	RS232 - TxD	OUT
8	RS232 - RTS	OUT
9	RS232 - CTS	IN
10	do not connect	—
11	do not connect	—
12	do not connect	—

Specifications

Optical data

Optical system	CMOS Imager, Rolling Shutter (1280x960)
Optical resolution	high resolution read field 960 x 640 wide range read field 960 x 640
Read range	20 ... 300mm
Resolution	1D codes: m = 0.076mm (3mil), distance dependent 2D codes: m = 0.127mm (5mil), distance dependent
Light source illumination	integrated LED (visible red light)
Light source target LED (aimer)	integrated LED (visible blue light)
Contrast	25% for 1D code, 35% for 2D code

Code specifications

Code types	1D: Codabar, Code 11, Code 32, Code 39, Code 93, Code 128, Interleaved 2 of 5, GS1 DataBar (RSS), MSI Plessey, Pharmacode, UPC/EAN, 2 of 5 (ATA, Matrix, Hong Kong, Straight, NEC), Telepen
	Stacked 1D: PDF417, MicroPDF, GS1 Composite, Codablock F
	2D: Data Matrix, Aztec Code, QR Code, Micro QR, MaxiCode
	Postal Codes: Australian Post, Intelligent Mail, Japan Post, KIX Code, Korea Post, Planet, Postnet, UK Royal Mail, UPU ID Tags

Electrical data

Operating voltage U_B	3.3 ... 5.5VDC
Current consumption	typ. 350mA (continuous reading) typ. 75mA (illumination inactive)

Interfaces

Interface type	RS232
Baud rate RS232	9,600 ... 115,200Bd, configurable
Data formats RS232	configurable
Trigger	switching input (active/not active = 0V/+5V or not connected) or Presentation Mode (Motion Control)
Switching output	NPN transistor output, max. 20mA / successful reading
Buzzer	NPN transistor output (modulated) / successful reading

Mechanical data

Weight	20g
Dimensions (HxWxD)	27x45x25mm
Fastening	4 threaded inserts M2, 2mm deep
Connection type	Molex Inc. (53398-1271), 12-pin

Environmental data

Temperature range (operation)	0°C ... +50°C
Ambient temperature (storage)	-20°C ... +60°C
Air humidity	10 ... 90% rel. humidity, non-condensing
Ambient light	max. 100,000 lux
Standards conformity	CE, FCC, EN 55022:2006 Class B, IEC 62471:2006

Remarks

Operate in accordance with intended use!

- ⚠ This product is not a safety sensor and is not intended as personnel protection.
- ⚠ The product may only be put into operation by competent persons.
- ⚠ Only use the product in accordance with the intended use.

● Features

Very small and light scan engine with integrated decoder for all common 1D and 2D codes.
Data transmission via configurable RS232 interface.

Read ranges

Code type / resolution m	Typical reading distance [mm]			
Code 39 / 0.076mm (3mil)		80	102	
Code 39 / 0.190mm (7.5mil)	33		182	
GS1 Databar / 0.267mm (10.5mil)	20		220	
UPC / 0.330mm (13mil)	28		280	
Data Matrix / 0.127mm (5mil)	43	115		
Data Matrix / 0.160mm (6.3mil)	33	150		
Data Matrix / 0.254mm (10mil)	20	180		
Data Matrix / 0.528mm (20.8mil)	28		343	

Order guide

Product Name	Description	Part no.
DCR80M2/R2-S5	CMOS imager scan engine for 1D and 2D codes, RS232 interface, Molex 53398-1271 connection, 12-pin	50129208
MA-CR	Adapter board for contacting the 12-pin connector and implementation at SUB-D, 9-pin	50128204