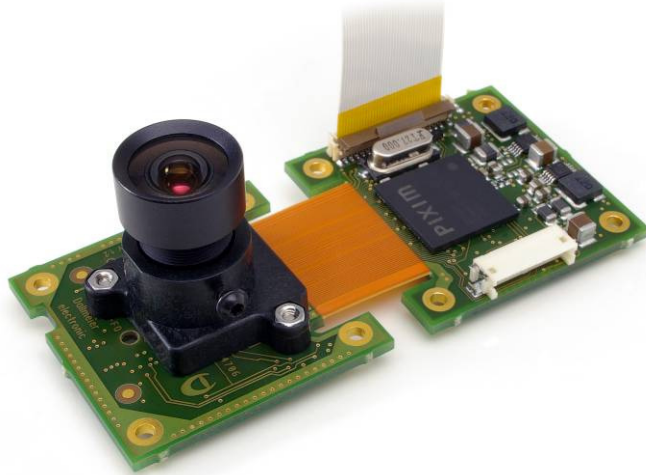


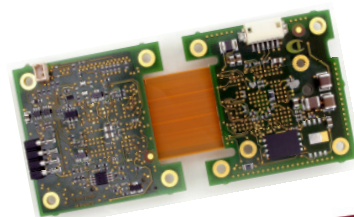
DB3800D-bl2



Ultra Wide Dynamic Range 38x38 flex Boardcam digital incl. Lens and power-video cable

The DB3800A flex Boardcam is based on the breakthrough Cam_inPIX® technology:

- Highly integrated two-chip set based on Pixim's innovative Digital Pixel System® technology.
- Pure Digital Signal Processing of the **Cam_inPIX®** technology dramatically enhances the dynamic range up to 120 dB.
- Wide dynamic range provides excellent image quality in high-contrast environments.
- High sensitivity for low-light images; up to 0.8 lux with F1.2, 50IRE.
- 1/3" DPS sensor allows multi-sampling capture for images high in details.
- Real Day/Night functionality available by means of supported mechanical IR Cut Filter Control.
- Progressive scan image capture and progressive scan image data transmission suppress all kinds of artefacts.
- Advanced noise reduction.
- Digital and analogue signal output format.
- Enhanced image quality by means of numerous control options supported by DPS technology (AWB, AGC, BLC, AC Line lock und extended slow shutter among others).
- HiRes incl. IR Cut Filter via lens coating



Item number

200.400.8.5

DB3800D-bl2

Technical specifications

Sensor	1/3" DPS sensor -CMOS-
Colour Filter array	RGB
Processing	17-bit Digital Signal Processing
Dynamic range (max)	102 dB Typical - 120 dB max
Image capture	Progressive Scan- 50 fps /60 fps (PAL/NTSC)
Image data transmission rate	25 fps /30 fps (PAL/NTSC)
Image data transmission format	PsF- Progressive With Segmented Frames
Total pixel (H x V)	742 x 552 Pixel
Effective pixel (H x V)	720 x 540 Pixel
Horizontal resolution	540 H TV-Lines
B/W & colour mode	Yes, colour mode also in night mode selectable.
IR Cut Filter	Incl. via lens coating
Mechanical IR Cut Control	Supported (3.3V, max. 100mA)
Light sensitivity	0.8 lux; with F1.2 & 50IRE
Zoom	Digital 4x
Slow shutter	Up to 8x
Signal to noise ratio	>48 dB
Brightness adjustment (ALC/AE)	Automatic/ manual
Backlight compensation	BLC, adjustable Backlight zone
AGC; AGC Range	Brightness und gain limit adjustable ; 0 dB to 48 dB
Gamma correction	Automatic/ manual
Adjustable white balance	ATW, AWB, MWB (2000K to 11000K)
Synchronisation	Intern, AC Line lock
Language	English
Video standard	PAL, NTSC
Signal format analogue output	CVBS, 75 Ω (PAL, NTSC) (analogue output)
Signal format digital output	BT 656
Auto Iris Control	DC-iris supported
Power supply	3.3 V
Power consumption	Appr. 2 Watt

DB3800D-bl2

Mechanical specifications

Dimension of sensor board unit (L x W)	38 mm x 38 mm
Dimension of processor board unit (L x W)	38 mm x 38 mm
Dimension of flex board (H x L x W)	82 mm x 38 mm
Mounting-hole diameter	4x Ø 2.4mm
Standoffs	Required, 4 x 8mm (L)
Hole center distance	30.74mm
Flange of focal length C-Mount	19.516 mm (+/- 0.321mm)
Flange of focal length CS-Mount	14.516 mm (+/- 0.321mm)
Video-Power cable	Included
Board lens holder	Ø 12mm thread mount

Lens specifications

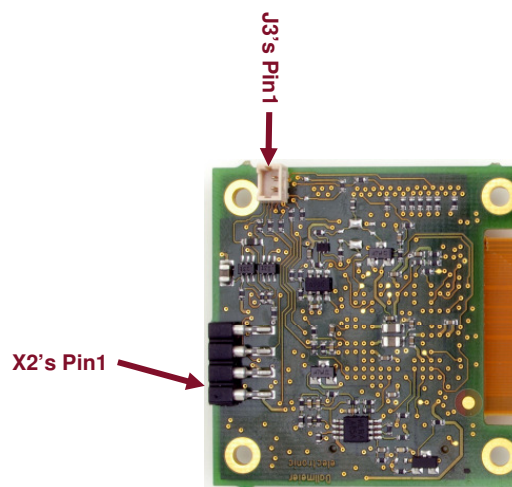
Format	1/3"
Mount	12mm thread mount
Type of lens	mono focal
Iris Drive	fixed Iris
Iris range & focal length	F1.4 ; 3,6 mm
Horizontal angle of view	83.2°
IR Cut Filter	Via lens coating



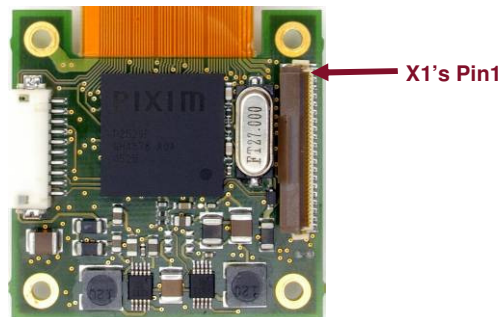
DB3800D-bl2

Connectors Pin Assignment:

Pin	X2	Pin function
1	VCC3V3	Supply voltage
2	GND	Ground
3	VIDEO OUT	Video output
4	-	Not connected



Pin	J3	Pin function
1	J3's pin1	Filter shifter
2	J3's pin2	Filter shifter



Connector type:

X1: Hirose_FH12-36S-0.5SV
 X2: MPE Garry_BLSMD30-4-295-U
 J3: Molex_53047-0210

DB3800D-bI2

Connectors Pin Assignment:

Pin	X1	Pin Function
1	GND	Ground
2	DV0	BT 656 data line 0
3	DV1	BT 656 data line 1
4	DV2	BT 656 data line 2
5	GND	Ground
6	DV3	BT 656 data line 3
7	DV4	BT 656 data line 4
8	DV5	BT 656 data line 5
9	DV6	BT 656 data line 6
10	GND	Ground
11	DV7	BT 656 data line 7
12	DV8	BT 656 data line 8
13	DV9	BT 656 data line 9
14	GND	Ground
15	DVCLK	BT 656 clock
16	GND	Ground
17	RESETNP IN	Reset
18	GND	Ground
19	RXDV	Serial interface (3,3V TTL)
20	TXDV	Serial interface (3,3V TTL)
21	DRV+ (Auto iris)	DC-auto iris interface
22	GND	DC-auto iris interface (ground)
23	CNTL-(Auto iris)	DC-auto iris interface
24	CNTL + (Auto iris)	DC-auto iris interface
25	LINELOCKIN	Line lock input
26	GND	Ground
27	VID0OUT	Video output
28	VCC3V3	Power Supply
29	VCC3V3	Power Supply
30	VCC3V3	Power Supply
31	VCC3V3	Power Supply
32	Reserved	Reserved
33	GND	Ground
34	Reserved	Reserved
35	Reserved	Reserved
36	Reserved	Reserved

DB3800D-bl2

Mechanical layout

