

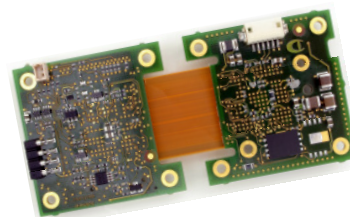
## DB3800D



### Ultra Wide Dynamic Range 38x38 flex Boardcam digital

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).



**Item number**  
200.402.FB

## DB3800D

### Technical specifications

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

## DB3800D

### 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

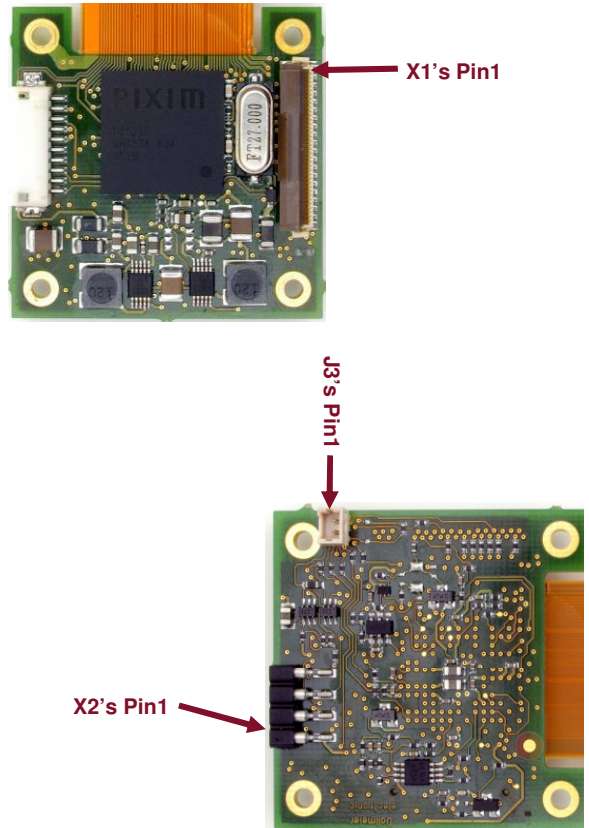
### Connectors Pin Assignment:

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



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### 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 input (3,3V TTL)
20	TXDV	Serial interface output (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

## Mechanical layout

