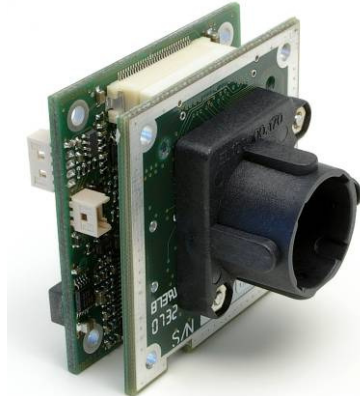


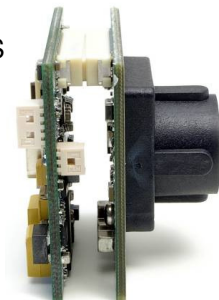
## DB3800A-b11



### Ultra Wide Dynamic Range 38x38 sandwich Boardcam incl. board lens holder and IR Cut Filter

The DB3800A sandwich 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.
- IR Cut Filter included for excellent colour reproduction
- Real Day/Night functionality available by means of supported mechanical IR Cut Filter Control. Progressive scan image capture and Progressive With Segmented Frames -PsF- Image data transmission suppress all kind of artefacts.
- Advanced noise reduction.
- Enhanced image quality by means of numerous control options supported by DPS (AWB, AGC, BLC, AC Line lock und extended slow shutter among others).



**Item number**  
200.400.8.4

## DB3800A-b11

### 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>	Included
<b>Mechanical IR Cut Control</b>	Supported, (3.3V, Max 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>Configuration</b>	Outlined OSD: remote-controlled via UTC- commands
<b>Language</b>	English
<b>Video standard</b>	PAL, NTSC
<b>Signal format (Video )</b>	CVBS, 75 Ω (PAL, NTSC)
<b>Auto Iris Control</b>	DC-iris supported
<b>Power supply</b>	12 V
<b>Power consumption</b>	Appr. 2 Watt

## DB3800A-b11

### Mechanical specifications

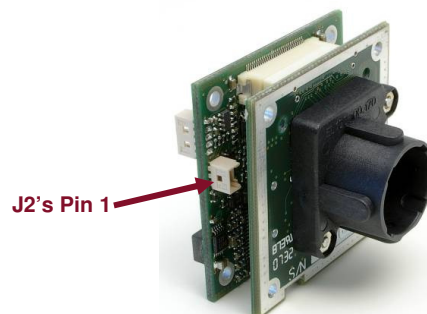
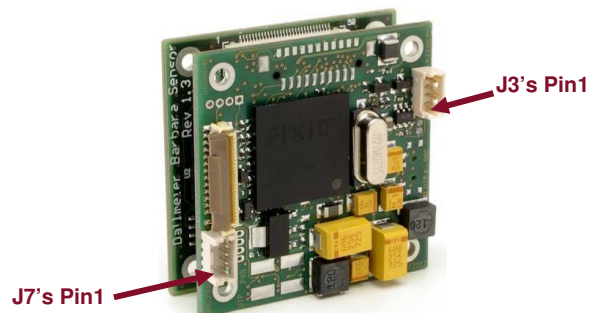
Dimension of sensor board unit (L x W)	38 mm x 38 mm
Dimension of processor board unit (L x W)	38 mm x 38 mm
Dimension of Sandwich-board (H x L x W)	28mm x 38mm x 38mm
Mounting-hole diameter	4x Ø 2.4mm
Hole center diameter	30.37 mm
Standoffs	Required, 4 x 8mm (L)
Flange of focal length C-Mount	20.056 mm (+/- 0.321mm)
Flange of focal length CS-Mount	15.056 mm (+/- 0.321mm)
Video power cable	Included
Board lens holder	Ø 14mm socket

### Connectors Pin Assignment:

Pin	J7	Pin function
1	VIDEO GND	Video interface
2	VIDEO OUT	Video interface
3	GND	Supply voltage
4	VIN	Supply voltage

Pin	J3	Pin function
1	CNTL +	DC-iris interface
2	CNTL -	DC-iris interface
3	DRV -	DC-iris interface
4	DRV+	DC-iris interface

Pin	J2	Pin function
1	J2's Pin1	Filter shifter
2	J2's Pin2	Filter shifter



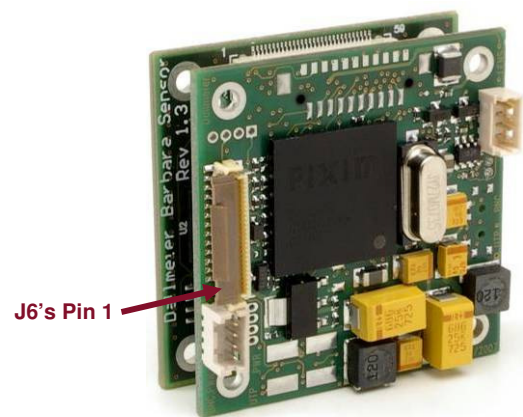
### Connector type:

J7: Hirose\_DF13-4P-1.25DSA  
 J3: Molex\_053047-0410  
 J6: Hirose\_FH12-24S-0.5SV  
 J2: Molex\_53047-0210

## DB3800A-b11

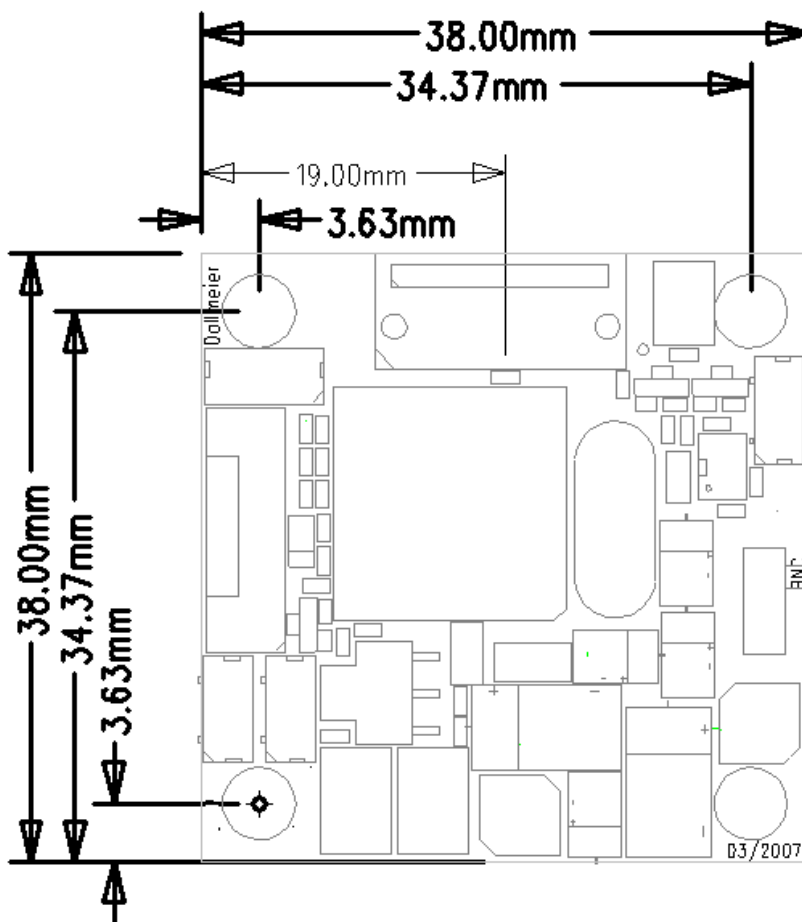
### Connectors Pin Assignment:

Pin	J6	Pin function
1	VIN , 10V<VIN<14V	Supply voltage
2	VIN	Supply voltage
3	LINELOCKIN	Line lock input
4	GND	Ground
5	GND	Ground
6	GND	Ground
7	VID0GND	Video interface
8	VIDEO CVBS	Video interface
9	VID0GND	Video interface
10	GPI030*	Enter
11	GPI031	Left
12	GPI032	Up
13	GPI033	Right
14	GPI034	Down
15	GPI035	Not used
16	DRV+	DC-iris interface
17	DRV-	DC-iris interface
18	CNTL-	DC-iris interface
19	CNTL+	DC-iris interface
20	485_R-	RS485 interface -input-
21	485_T-	RS485 interface -output-
22	VCC3V3IO	Voltage output (3.3 V)
23	485_R+	RS485 interface -input-
24	485_T+	RS485 interface -output-



## DB3800A-bl1

### Mechanical layout



## DB3800A-bl1

### Menu configuration

