Dallmeier components
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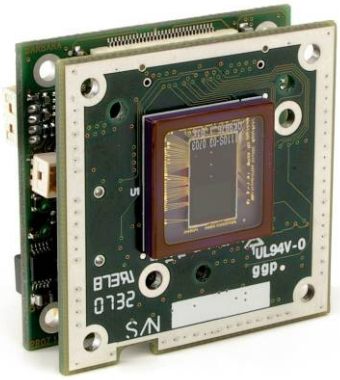
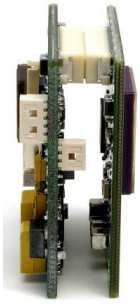
DB3800A



Ultra Wide Dynamic Range 38x38 sandwich Boardcam

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.
- 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 technology (AWB, AGC, BLC, AC Line lock und extended slow shutter among others).



Item number
200.400.8.1

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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	Required for color reproduction
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 and 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
Configuration	Outlined OSD: remote-controlled via UTC-commands
Language	English
Video standard	PAL, NTSC
Signal format (Video)	CVBS, 75 Ω (PAL, NTSC)
Auto Iris Control	DC-iris supported
Power supply	12 V
Power consumption	Appr. 2 Watt

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Mechanical specifications

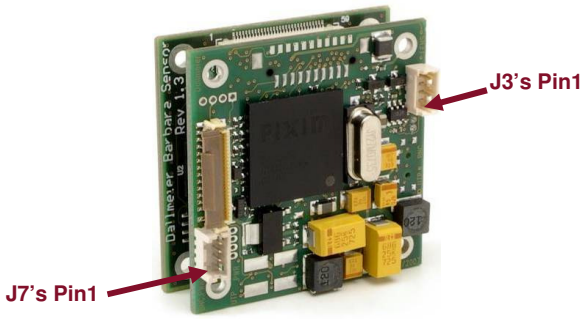
Dimension of sensor board unit (L x W)	38 mm x 38 mm
Dimension of processor board unit (L x W)	38 mm x 38 mm
Dimension of Sandwich-board (H x L x W)	28mm x 38mm x 38mm
Mounting-hole diameter	4x Ø 2.4mm
Hole center diameter	30.37 mm
Standoffs	Required, 4 x 8mm (L)
Flange of focal length C-Mount	19,516 mm (+/- 0.321mm)
Flange of focal length CS-Mount	14.516 mm (+/- 0.321mm)

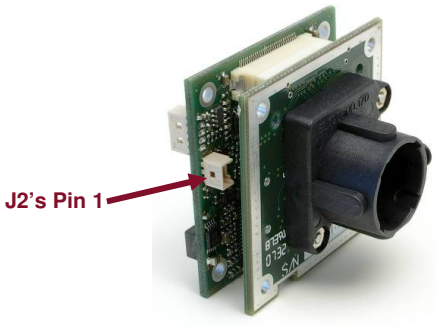
Connectors Pin Assignment:

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

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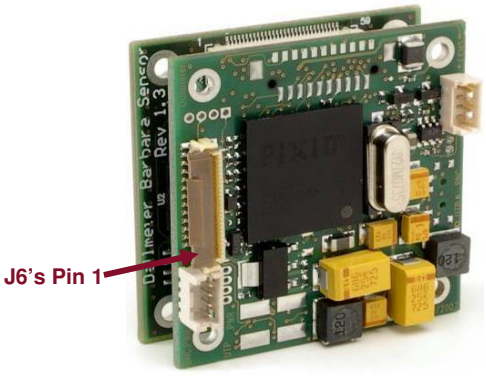
Connectors Pin Assignment:

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-



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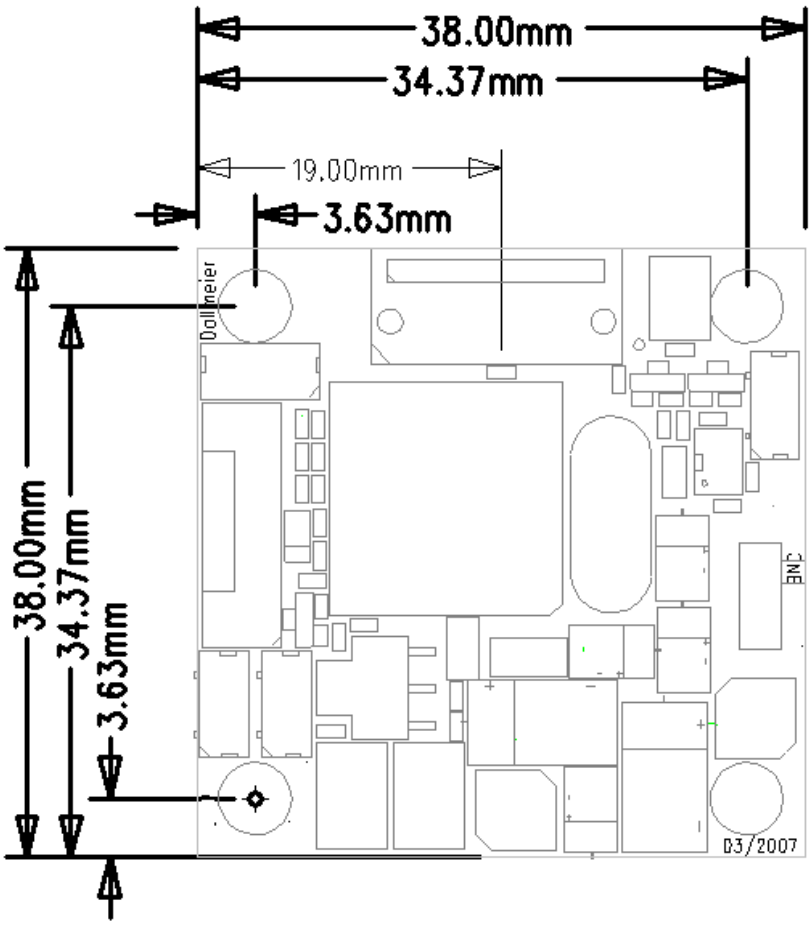
Mechanical layout



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Menu configuration