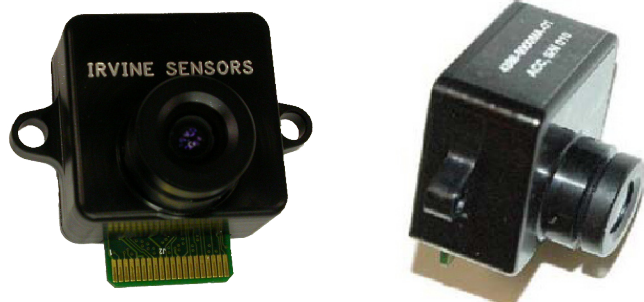


Fast Frame Digital Video Camera - Parallel



General Description:

This high speed, low noise, global shuttered, CMOS based video camera integrates all the features required by a wide variety of applications. The byte-wide output format delivers images of superb contrast and precise clarity, directly to any associated processor.

Product Features:

- 60 frames per second
- Progressive scan
- Global Shutter
- Extended horizontal resolution
- High Sensitivity
- Wide dynamic range
- 10-bit
- Automatic Exposure
- Low power
- Small size
- Rugged package
- Extended Operating Range:
-40° to +85° C

Optics:

1/3" Format, F 2.8, Fixed Focus

- A. 2.8mm, 89° diagonal
- B. 4.3mm, 48° diagonal
- C. 6.0mm, 30° diagonal

Others available on request

Applications:

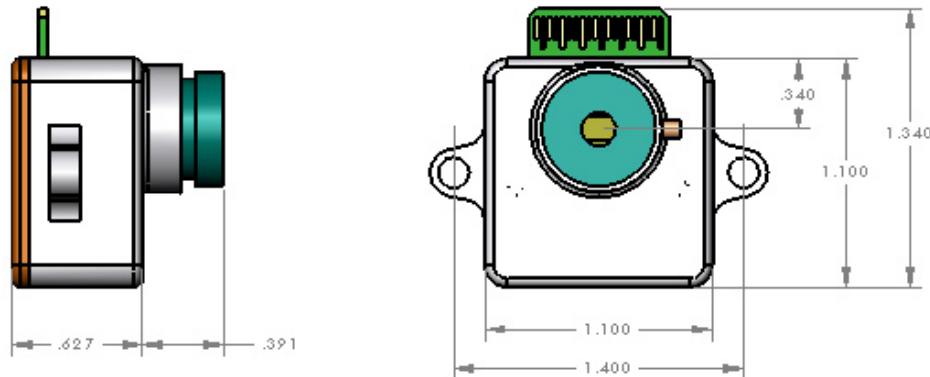
- Automotive
 - Lane tracking
 - Departure warning
 - Collision avoidance
 - Pedestrian protection
 - Back up monitor
- Traffic Control
- License plate recognition
- Surveillance
- Event recorder
- Computer vision
- Bar code reader
- Machine vision
- Industrial control

Connector pin outs:

Pin #	Mnemonic	Signal Description
1	GND	Camera ground
2	+PWR	Camera Power
3	Shield	
7	fsync	Flash Sync
8	/reset	Reset
13	sys_clk	System clock, 26.6 MHz
17	SGND3	Shield GND #3
4, 5, 6 19, 21	NC	no connect
20	pclk	Parallel Clock
23	SGND2	Shield GND #2
18,16,14 10,12,26 24,22,28 30	pdout[0..9]	Parallel video data out
34	expose	shutter trigger
38	SGND1	Shield GND #1
39	fm_valid	Frame Valid
40	ln_valid	Line Valid

Fast Frame Digital Video Camera - Parallel

Mechanical Dimensions (inches):



Specifications:

Parameter	Standard	Options ¹
CMOS Sensor	Micron MT9V022	
Pixels	752 x 480	Decimation Region of Interest
Cell Size	6.0 x 6.0 μm	Horizontal & Vertical Binning
Shutter	Global / electronic	
Scanning	Progressive	Horizontal & Vertical Flip
Gray Scale	10-bit	8-bit companded
Output	Byte parallel	
Video Rate	60 fps	
Master Clock	26.6 MHz	Variable ²
Signal/Noise Ratio	50 dB min.	
Dynamic Range	> 60 dB min.	
Spectral Range	450 - 1050 nm	
AEC	Automatic	Adjustable
Response	Linear	
Exposure	30 - 200,000 μs	Adjustable, Regional Weighting
Supply Voltage	3.8 VDC $\pm 5\%$	
Power	< 400 mW	
Operating Temperature	-40° to +85° C	
Weight		
Random Vibration	7 gms @ 10 - 2,000 Hz	
Shock	70 G	

Notes:

1. With the optional I²C interface.
2. When external clock is supplied.
3. Specifications subject to change without notice.