Add-on Structure Contact Image Sensor Heads

LSH3008-CA10A

The Basic CIS by which the add-on can shorten the development period of a product sharply while being able to satisfy broad demand. A taper glass and tempered glass can respond as an option.
As a measure against a paper jam, the custom-made correspondence of the special cantact plate can be carried out.

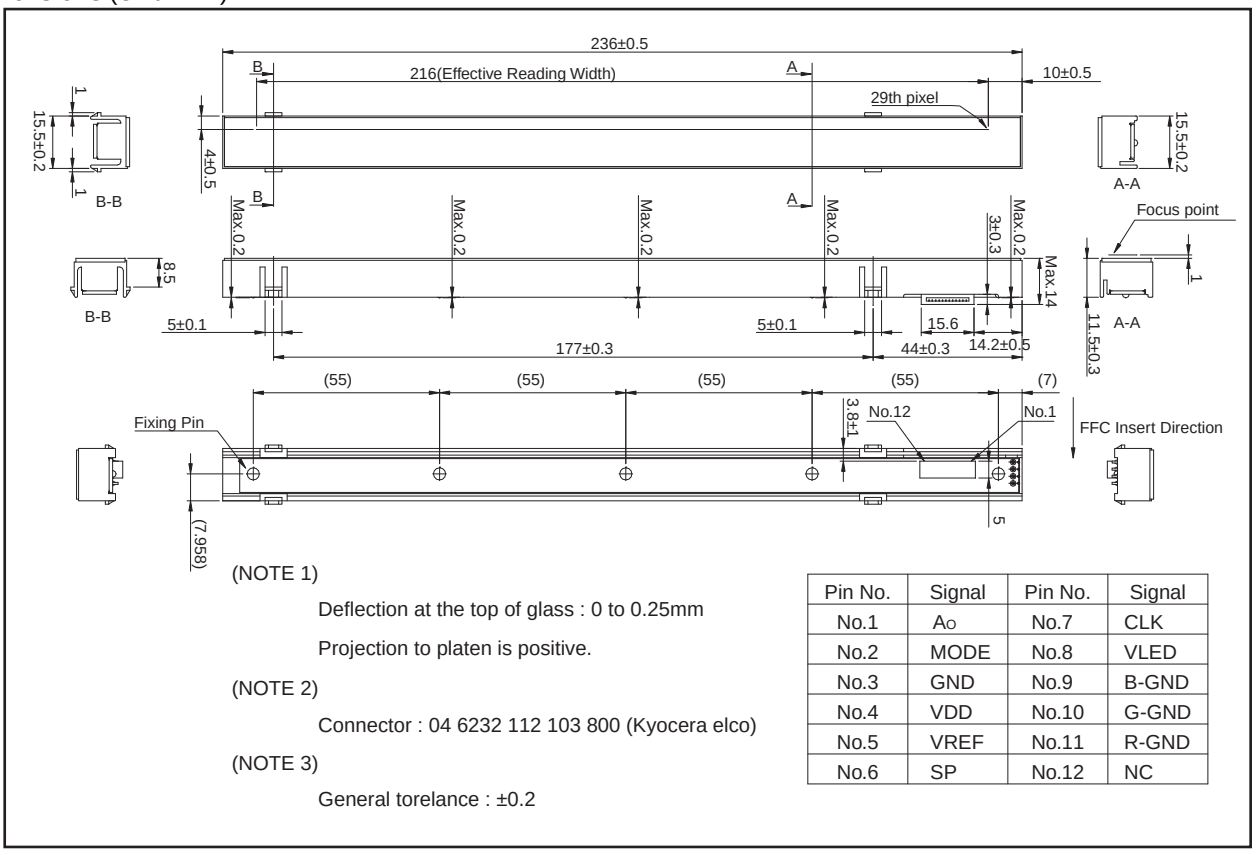
●Applications

Document Scanners,Bill sorters.Wide Format Scanners,and Lottery.

●Features

1) Signal amplifier integrated into each sensor IC in order to eliminate external noise ; compatible with 3.3V interface.
2) LED light source mounted on the same substrate as the sensor chip itself, resulting in a more compact, lightweight package.
3) Proprietary prism maintains a uniform output signal.

●Dimensions (Unit : mm)



(NOTE 1)

Deflection at the top of glass : 0 to 0.25mm

Projection to platen is positive.

(NOTE 2)

Connector : 04 6232 112 103 800 (Kyocera elco)

(NOTE 3)

General torelance : ±0.2

Pin No.	Signal	Pin No.	Signal
No.1	A_O	No.7	CLK
No.2	MODE	No.8	VLED
No.3	GND	No.9	B-GND
No.4	VDD	No.10	G-GND
No.5	VREF	No.11	R-GND
No.6	SP	No.12	NC

●Characteristics

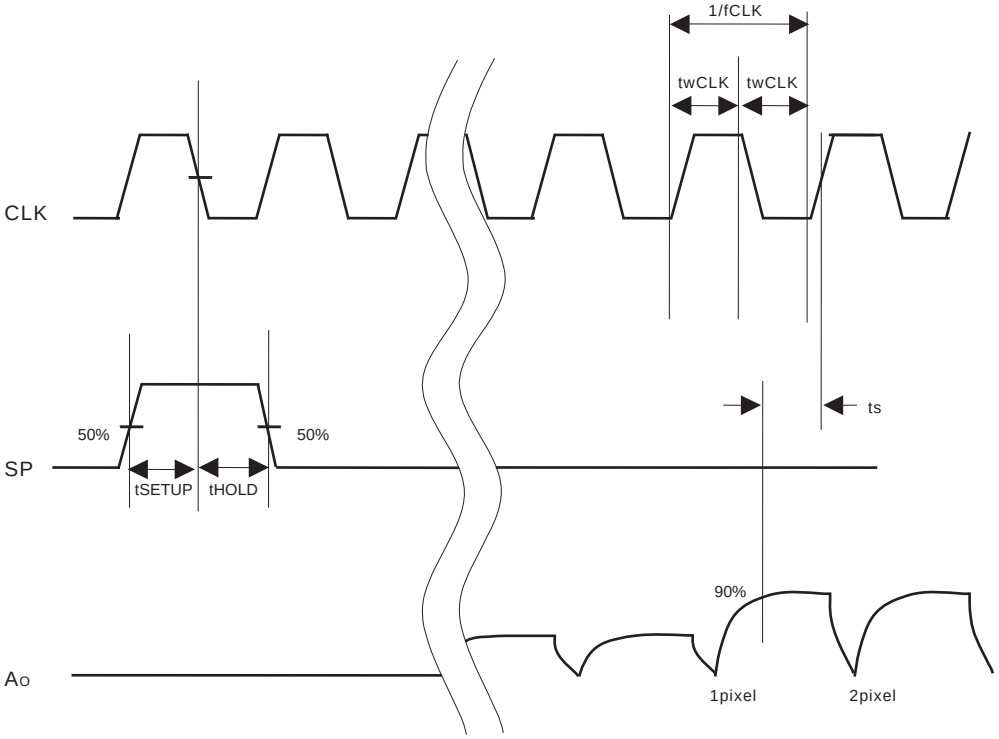
Parameter	Symbol	Typ.	Unit
Effective scanning width	–	216	mm
Primary scan dot density	–	300	dpi
Total dot number	–	2592	dots
Power supply voltage	V_{DD}	3.3	V
Scanning speed	SLT	1.05×3	ms / line
Clock frequency	CLK	8	MHz
Maximum dynamic range	VRMax.	0.5	V
Minimum dynamic range	VRMin.	0.25	V
Dark output	Vod	V_{REF}±0.1	V
Operating temperature	–	5 to 45	°C

●Pin assignments

No.	Circuit	I / O	Functions
1	A_O	O	Analog Output
2	MODE	I	Mode
3	GND	I	Ground
4	V_{DD}	I	Power Supply
5	V_{REF}	I	Reference Voltage
6	SP	I	Start Pulse
7	CLK	I	Clock
8	V-LED	I	LED power supply
9	B-GND	I	B-LED ground
10	G-GND	I	G-LED ground
11	R-GND	I	R-LED ground
12	NC	–	–

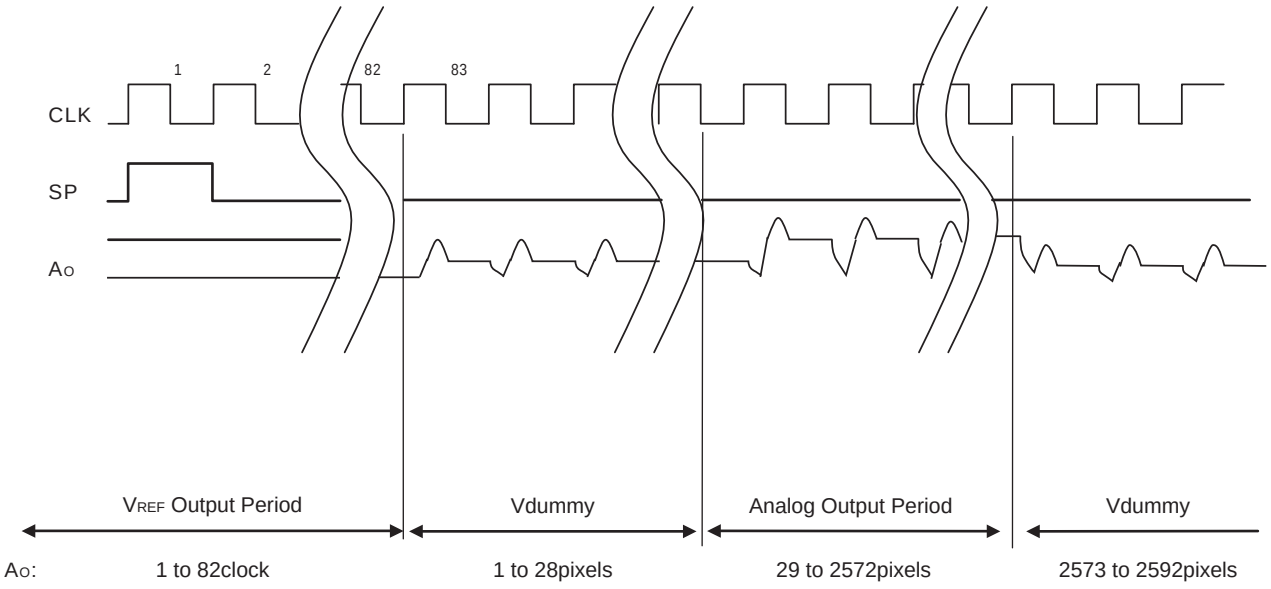
●Timing chart

(a) CLK Timing Chart

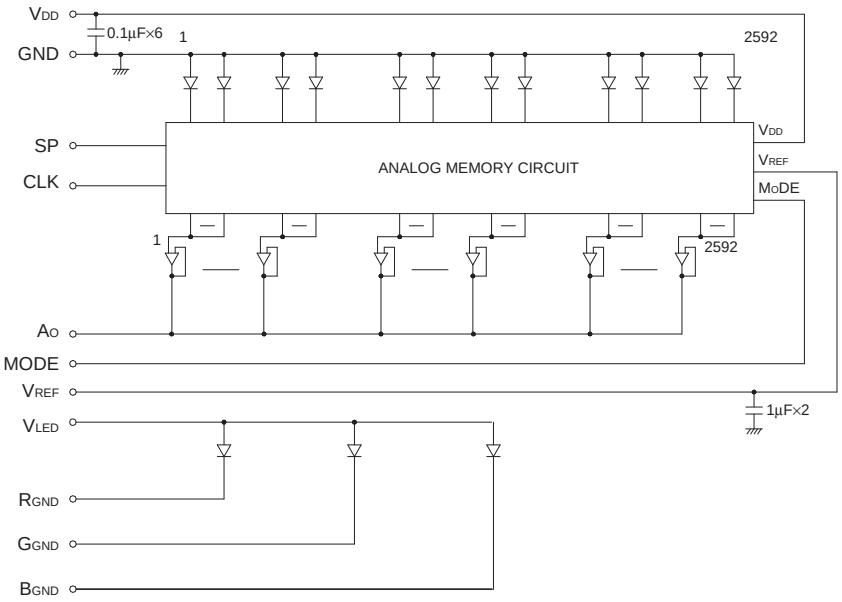


(b) Data Output Timing Chart (300dpi mode)

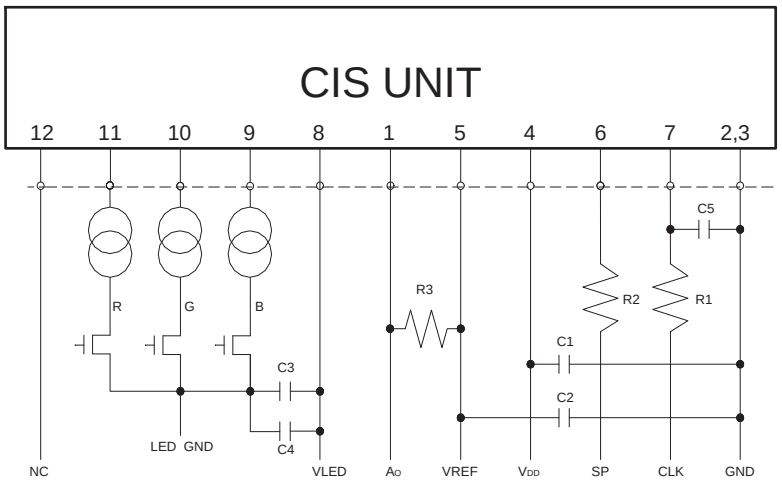
After turning on the SP pulse, the analog output shape starts from the setting up point of 83 clock pulse.



●Inner circuit



●Peripheral circuit



R1=R2=10 to 100Ω, R3=100KΩ
C1=C2=47µF
C3=100µF, C4=0.1µF, C5=100pF

Note : The above constant value are examples, and please adjust the parameters by evaluating waveforms with the device which is used.

Notes

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