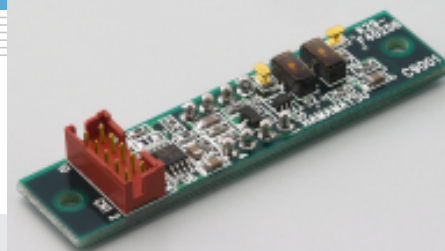


Driver circuit for CMOS linear image sensor C9001

Compact, easy-to-use driver circuit



C9001 is a driver circuit designed for S8377/S8378 series CMOS linear image sensors. C9001 operates a linear image sensor by just inputting two signals (clock and start) and a single +5 V supply. C9001 also outputs a trigger signal for A/D conversion so the external circuit configuration can be simplified. C9001 does not include an image sensor, so select the desired image sensor and order it separately.

Features

- Single power supply (+5 V) operation
- Operation with two input signals (clock and start)
- Compact: 50 × 12 mm
- Trigger signal output for A/D conversion

Applications

- Various types of image acquisition
- Optical detection equipment

■ Absolute maximum ratings (Ta=25 °C)

Parameter	Symbol	Value	Unit
Supply voltage	Vcc	+7	V
Digital input voltage	-	V	V
Operating temperature	Topr	0 to +50 *1	°C
Storage temperature	Tstg	0 to +70 *1	°C

*1: No condensation

■ Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage	+Vs	4.9	5.0	5.2	V
Current consumption	+Is	-	20	30	mA
Digital input	High level	V _{IH}	3.8	-	V
	Low level	V _{IL}	0	-	1.6
Start pulse width	T _{pwst}	1/2 × f _{CLK}	1/f _{CLK}	2/f _{CLK}	ns
Clock frequency	f _{CLK}	0.1	-	500	kHz
Digital rise/fall times	t _{TLH} /t _{THL}	-	14	25	ns
Date rate	f _V	0.1	-	500	kHz
Offset output	V _{offset}	-	0.5	-	V
VIDEO saturation output *2	V _{ast}	3.3	-	4.0	V

*2: From offset value.

