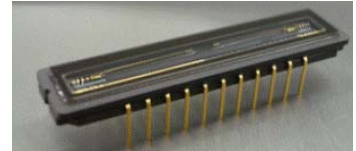


CCD Linear Image Sensor

CCD (Charge Coupled Device)

**TCD1209DG****2048-elements, for optical character reader(OCR) and fax machines.**

The TCD1209DG is a high speed and low dark current 2048 elements CCD image sensor.

The sensor is designed for facsimile, imagescanner and OCR.

The device contains a row of 2048 elements photodiodes which provide a 8 lines / mm (200 DPI) across a B4 size paper.

The device is operated by 5 V (pulse), and 12 V power supply.

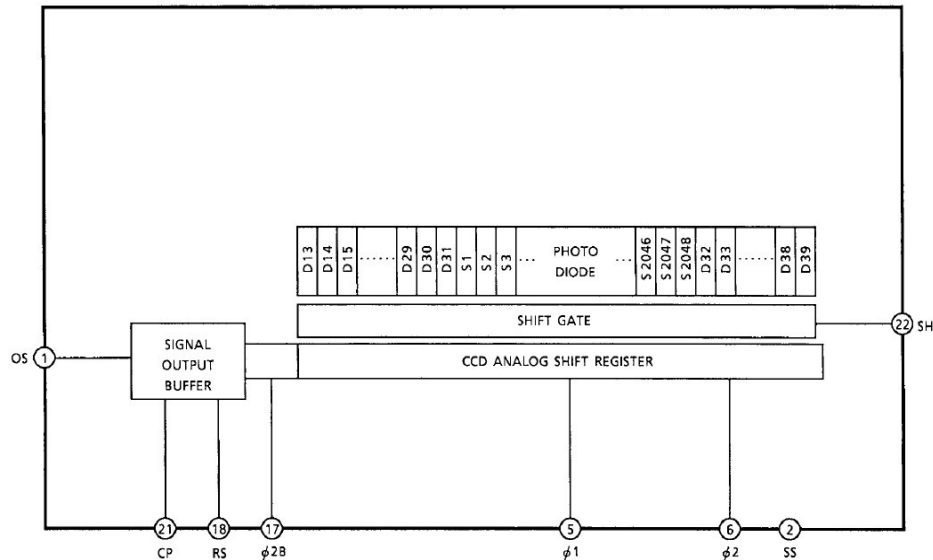
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**■ Features**

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- ▶ Number of Image Sensing Elements: 2048
- ▶ Image Sensing Element Size: 14 $\mu$ m by 14 $\mu$ m on 14 $\mu$ m centers
- ▶ Photo Sensing Region: High sensitive and low voltage dark signal pn photodiode
- ▶ Clock: 2 phase (5V)
- ▶ Package: 22 pin Cerdip

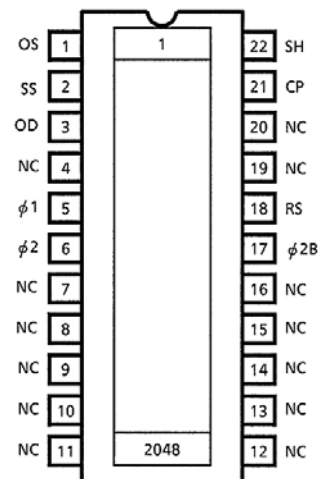
## Circuit Diagram



## Pin Names

Pin No.	Symbol	Name
1	OS	Signal Output
2	SS	Ground
3	OD	Power
4	NC	Non Connection
5	Ø1	Clock (Phase 1)
6	Ø2	Clock (Phase 2)
7~16	NC	Non Connection
17	Ø2B	Final Stage Clock (Phase 2)
18	RS	Reset Gate
19, 20	NC	Non Connection
21	CP	Clamp Gate
22	SH	Shift Gate

## Pin Connections (top view)



» For further information about Toshiba Sensors, please visit <http://www.semicon.toshiba.co.jp/eng/product/sensor/index.html>

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