

**Digital Potentiometer 10kOhm 32POS Non-Volatile Linear 8-Pin
SOIC N Tube****Manufacturer:** [Renesas Technology Corp](#)**Package/Case:** SOP-8**Product Type:** Data Conversion ICs**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active

Images are for reference only

[Inquiry](#)**General Description**

The Intersil X9313 is a digitally controlled potentiometer (XDCP). The device consists of a resistor array, wiper switches, a control section, and nonvolatile memory. The wiper position is controlled by a 3-wire interface. The potentiometer is implemented by a resistor array composed of 31 resistive elements and a wiper switching network. Between each element and at either end are tap points accessible to the wiper terminal. The position of the wiper element is controlled by the CS, U/D, and INC inputs. The position of the wiper can be stored in nonvolatile memory and then be recalled upon a subsequent power-up operation. The device can be used as a three-terminal potentiometer or as a two-terminal variable resistor in a wide variety of applications including:

Control
Parameter adjustments
Signal processing

Key Features

Solid-state potentiometer

3-wire serial interface

32 wiper tap points

Wiper position stored in nonvolatile memory and recalled on power-up

31 resistive elements

Temperature compensated

End to end resistance range $\pm 20\%$

Terminal voltages, -VCC to +VCC

Low power CMOS

Active current, 3mA max.

Standby current, 500 μ A max.

High reliability

Endurance, 100,000 data changes per bit

Register data retention, 100 years

RTOTAL

Packages

8 Ld SOIC, 8 Ld MSOP and 8 Ld PDIP

Pb-free available (RoHS compliant)

Recommended For You

X9C103SIZTI

Renesas Technology Corp

SOP8

X9C103PZ

Renesas Technology Corp

PDIP-8

X9313ZSZ

Renesas Technology Corp

SOP-8

X9314WSIZ

Renesas Technology Corp

SOP-8

X9313USZTI

Renesas Technology Corp

8-SOIC

X9317US8IZ

Renesas Technology Corp

SOP-8

X9C503SZ

Renesas Technology Corp

SOIC-8

X9317WS8IZ-2.7

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SOP-8

X9511WSIZ

Renesas Technology Corp

SOP-8

X9C503SIZTI

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SOP8

X95840WV20IZ-2.7

Renesas Technology Corp

TSSOP20

X9258TS24IZ-2.7

Renesas Technology Corp

SOP24

X9313WSZTI

Renesas Technology Corp

SOP8

X9313USZ

Renesas Technology Corp

SOP8

X9C503SIZ

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