

Pb-Free IIC XDCP, 100K QUAD, 256 TAPS HT SUSA CODE:8542390000

Manufacturers	<a href="#">Renesas Technology Corp</a>
Package/Case	SOP24
Product Type	Data Acquisition - Digital Potentiometers
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for X9258US24IZ-2.7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The X9258 integrates 4 digitally controlled potentiometers (XDCP™) on a monolithic CMOS integrated circuit. The digitally controlled potentiometer is implemented using 255 resistive elements in a series array. Between each element are tap points connected to the wiper terminal through switches. The position of the wiper on the array is controlled by the user through the 2-wire bus interface. Each potentiometer has associated with it a volatile Wiper Counter Register (WCR) and 4 non-volatile Data Registers (DR0:DR3) that can be directly written to and read by the user. The contents of the WCR controls the position of the wiper on the resistor array through the switches. Power-up recalls the contents of DR0 to the WCR. The XDCP™ 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, and signal processing.

## Features

Four potentiometers in one package

256 resistor taps/potentiometer: 0.4% resolution

2-wire serial interface

Wiper resistance, 40 $\Omega$  typical @  $V_+ = 5V, >$

Four nonvolatile data registers for each potentiometer

Nonvolatile storage of wiper position

Standby current <5 $\mu$ A max (total package)

Power supplies

$V_+ = 2.7V$  to 5.5V

100k $\Omega$ , 50k $\Omega$  total potentiometer resistance

High reliability

Endurance: 100,000 data changes per bit per register

Register data retention: 100 years

24 Ld SOIC, 24 Ld TSSOP

Dual supply version of X9259

Pb-free (RoHS compliant)

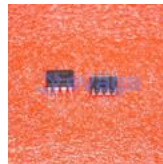


## Related Products



### [X9C103SIZ](#)

Renesas Technology Corp  
SOIC-8



### [X9C102PIZ](#)

Renesas Technology Corp  
PDIP-8



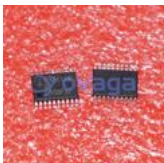
### [X9251UV24IZ-2.7](#)

Renesas Technology Corp  
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### [X9250TS24IZ-2.7](#)

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### [X9241AWVZ](#)

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