

Quad Digital Controlled Potentiometers (XDCP™), Non-Volatile/Low Power/2-Wire/64 Taps; Temperature Range: -40°C to 85°C; Package: 20-TSSOP T&R

Manufacturers	<a href="#">Renesas Technology Corp</a>
Package/Case	TSSOP-20
Product Type	Integrated Circuits (ICs)
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for X9241AWVIZT1 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The X9241A integrates four digitally controlled potentiometers (XDCP) on a monolithic CMOS integrated microcircuit. The digitally controlled potentiometer is implemented using 63 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 nonvolatile 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

2-wire serial interface

Register oriented format

Direct read/write/transfer of wiper positions

Store as many as four positions per potentiometer

Terminal Voltages: +5V, -3.0V

Cascade resistor arrays

Low power CMOS

High Reliability

Endurance-100,000 data changes per bit per register

Register data retention-100 years

16-bytes of nonvolatile memory

3 resistor array values

2k $\Omega$ , 10k $\Omega$ , 50k $\Omega$  or combination

Cascadable for values of 4k $\Omega$  to 200k $\Omega$

Resolution: 64 taps each pot

20 Ld plastic DIP, 20 Ld TSSOP and 20 Ld SOIC packages

Pb-free available (RoHS compliant)



**Related Products**



[X9258US24Z](#)

Renesas Technology Corp  
SOP24



[X9241AWSIZT1](#)

Renesas Technology Corp  
20SOIC



[X9C503PIZ](#)

Renesas Technology Corp  
DIP8



[X9C102SIZT2](#)

Renesas Technology Corp  
SOP8



[X9241AWSZT1](#)

Renesas Technology Corp  
SOP20



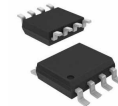
[X9C503SZT1](#)

Renesas Technology Corp  
8-SOIC



[X9C104SZT1](#)

Renesas Technology Corp  
SOP8



[X9C102SZT1](#)

Renesas Technology Corp  
SOP8