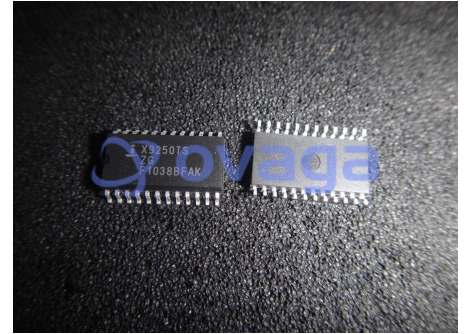


Digital Potentiometer 100kOhm 256POS Non-Volatile Linear 24-Pin SOIC W Tube

Manufacturers	<a href="#">Renesas Technology Corp</a>
Package/Case	SOP-24
Product Type	Data Acquisition - Digital Potentiometers
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for X9250TS24IZ-2.7 or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The X9250 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 SPI 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

256 resistor taps/pot - 0.4% resolution

SPI serial interface

Wiper resistance, 40 $\Omega$  typical @>

Four nonvolatile data registers for each pot

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 pot resistance

High reliability

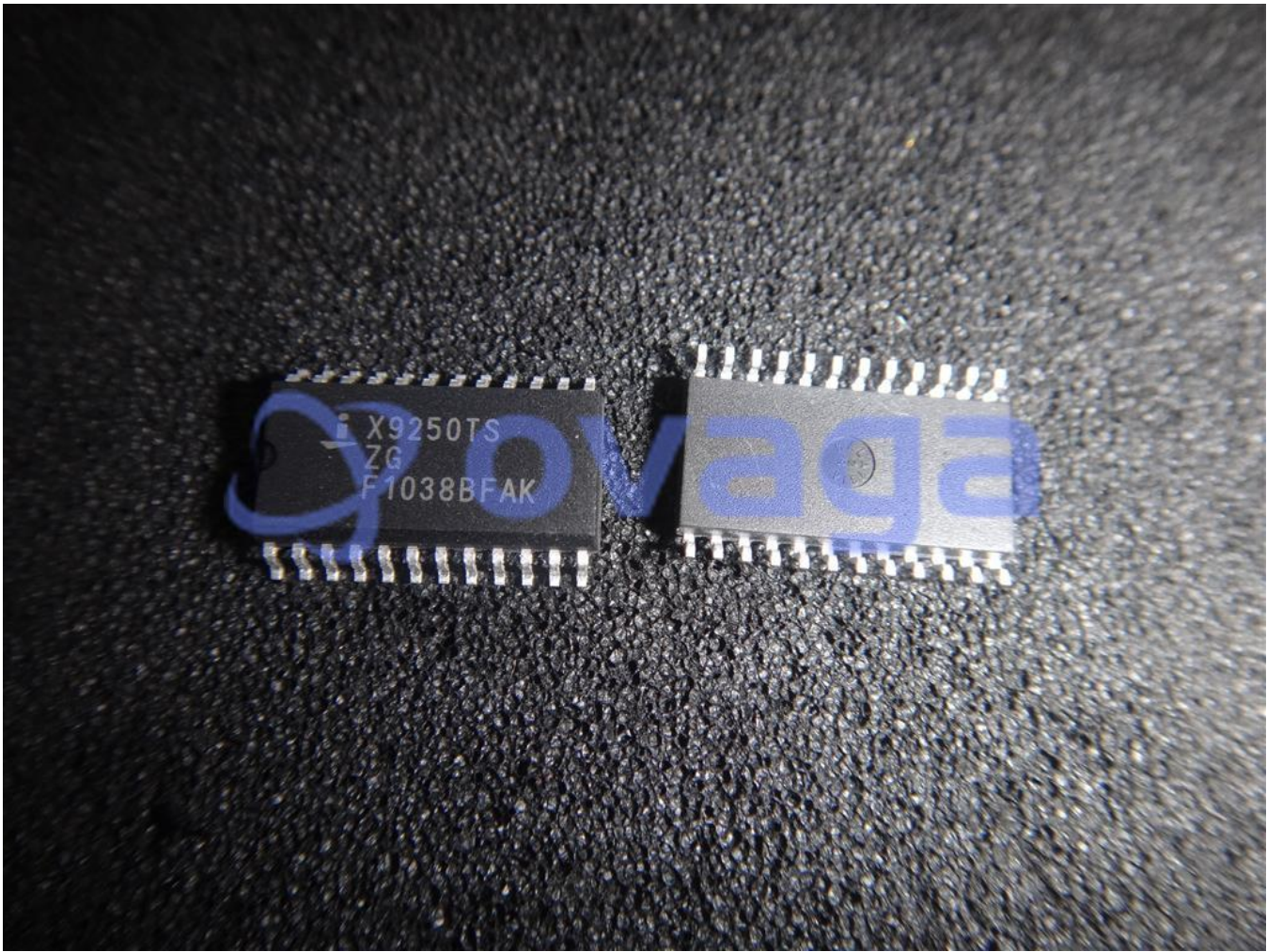
Endurance - 100,000 data changes per bit per register

Register data retention - 100 years

24 Ld SOIC, 24 Ld TSSOP

Dual supply version of X9251

Pb-free plus anneal available (RoHS compliant)

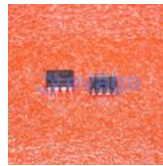


## Related Products



### [X9C103SIZ](#)

Renesas Technology Corp  
SOIC-8



### [X9C102PIZ](#)

Renesas Technology Corp  
PDIP-8



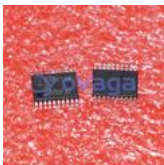
### [X9258US24IZ-2.7](#)

Renesas Technology Corp  
SOP24



### [X9251UV24IZ-2.7](#)

Renesas Technology Corp  
TSSOP-24



### [X9241AWVZ](#)

Renesas Technology Corp  
TSSOP-20



### [X9241AWPIZ](#)

Renesas Technology Corp  
DIP-20



### [X9C102SZ](#)

Renesas Technology Corp  
SOIC-8



### [X9C104SIZ](#)

Renesas Technology Corp  
SOIC-8