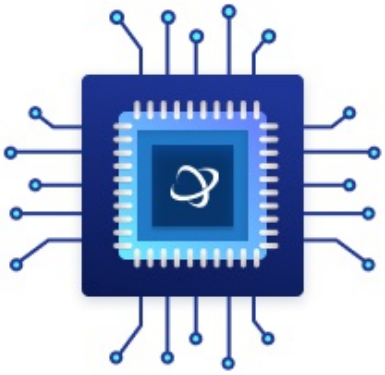
P9222-RAZGI8

Data Sheet

Wireless Power Receiver for Low Power Applications

Manufacturers	Renesas Technology Corp
Package/Case	
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for P9222-RAZGI8 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFQ

General Description

The P9222-R is an integrated single-chip wireless power receiver IC (Rx) for up to 5W applications. The P9222-R is highly efficient at light loads and very well-suited for low-power applications such as earbuds case charging. A unique Ping detect feature gives the user an early indication of the wireless charger connection and improves thermal performance at the end of complete battery charging. Low under-voltage lockout (UVLO) threshold allows the receiver to start up even with a weaker digital ping strength signal from a transmitter over an extended area.

The device includes over-temperature and under/over-voltage protection. The internal over-voltage clamping protects the rectifier output from rising above the overvoltage level when the receiver is quickly moved from a low-coupling position to a high-coupling position. The integrated 32-bit ARM® Cortex®-M0 processor (trademark of ARM, Ltd.) offers a high level of programmability and design parameters that can be easily configured through the I2C interface or an external EEPROM.

The P9222-R is available in a RoHS ultra-small WLCSP-40 package and it is rated for a -40°C to +85°C ambient operating temperature range.

Features

Ultra-compact, efficient wireless power receiver for up to 5W applications

WPC 1.2 Qi Baseline Power Profile (BPP) compatible

Optimized light load efficiency for low power applications

Ping detection for reduced power consumption at end of charging

Low under-voltage lockout (UVLO) for low voltage start-up for faster connections over an extended area

ASK and FSK modulation/demodulation for Bi-directional Communication: Rx-to-Tx and Tx-to-Rx

Easy configuration of design parameters through I2C interface on an external EEPROM

ADC input to measure battery voltage or system voltage

Embedded 32-bit ARM® Cortex®-M0 processor

Internal over-voltage clamping

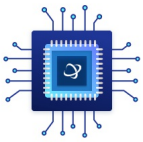
Low standby and operating mode power consumption

High performance low dropout (LDO) regulator with low RDS(on) and programmable current limiting

Supports I2C slave/master mode

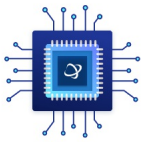
40-WLCSP: 5 × 8 ball array, 2.28 × 3.38 mm, 0.4mm pitch

Related Products



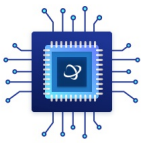
P91E0A-I5NHGI8

Renesas Technology Corp



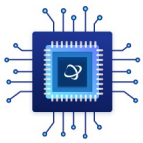
P91E0A-I5NHGI

Renesas Technology Corp



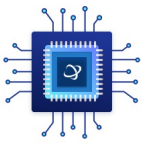
P91E0-I5NHGI

Renesas Technology Corp



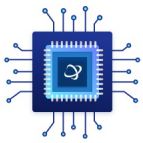
P9148ANRGI8

Renesas Technology Corp



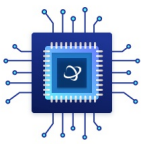
P9148NRGI8

Renesas Technology Corp



P9412-0AWQI8

Renesas Technology Corp



P91E0-I5NHGI8

Renesas Technology Corp

HIP4082IBZT

Renesas Technology Corp

SOIC-16