

Description

The RJGT102 is a member of high-security hardware authentication devices for copyright protection. Its encryption core is based on SHA-256 with 256-bits programmable parameters. The RJGT102 device includes 176-bytes of electrically erasable programmable read-only memory (EEPROM) organized as data zone/key zone and configuration zone. Access to the device is made through a two-wire serial interface at speeds of up to 400Kb/s, it's a slave device that always operates with MCU through the serial bus.

Applications

Such as Anti-counterfeiting consumables (printer ink tanks, medical disposables, or spare parts), Protecting MCU/FPGA/DSP Firmware or Media files, Storing data securely, Checking user passwords, etc.

Features

- 8-Bytes read-only memory for user Key, which is protected hardware-based key storage.
- 128-Bytes of EEPROM memory partitioned into four pages of 32-Bytes, Individual memory pages can not only permanently write protected but also encrypted.
- Superior hash algorithm with message authentication code (MAC), which is conform to the industry-standard SHA-256. Secure symmetric dynamic authentication device host and slave operations.
- Programmable and lockable 64-bits serial number (UID).
- Two-wire serial interface compatible with I²C, Supporting up to 400Kb/s.
- Operates over 3.0V to 3.6V voltage range from -40°C to +85°C.
- 5KV HBM ESD Rating.
- Built-in power on reset (POR) and 4MHz OSC.
- 6-lead SOT23 and 8-lead SOP Packages.



Table 1. Device summary

Package	Part number
SOT23-6L	RJGT102WDT6
SOP-8L	RJGT102WDP8

Application Block

