

# iButton Dallas

## DS1971

Data Sheet v1.0

2016-10-21



- Radius 8 mm, width 3,1 mm
- 256-bit EEPROM
- 1-Wire protocol based
- Resistant to dirt, moisture and shock

### Technical specification

Read /Write voltage	2,8V - 6,0 V DC
Working temperature	-40°C ~ +85°C
<sup>1</sup> EEPROM	256-bit
<sup>2</sup> Registration number	64-bit
Digital signal speed	16.3kbps

<sup>1</sup>Electrically erasable programmable read only memory.

<sup>2</sup> 8-bit family code + 48-bit serial number + 8-bit CRC tester.

### iButton description

The DS1971 256-bit EEPROM iButton is a rugged read/write data carrier that identifies and stores relevant information about the product or person to which it is attached. This information can be accessed with minimal hardware: for example, a single port pin of a microcontroller. The DS1971 consists of a factory-lasered registration number that includes a unique 48-bit serial number, an 8-bit CRC, and an 8-bit Family Code (14H) plus 256 bits of EEPROM. The power to program and read the DS1971 is derived entirely from the 1-Wire communication line. Data is transferred serially via the 1-Wire protocol which requires only a single data lead and a ground return. The 48-bit serial number that is factory lasered into each DS1971 provides a guaranteed unique identity which allows for absolute traceability. Its compact button-shaped profile is self-aligning with cup-shaped receptacles, allowing the DS1971 to be used easily by human operators or automatic equipment. Applications include work-in-progress tracking, electronic travelers, access control and storage of calibration constants.

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#### Physical properties

Radius, mm	8
Width, mm	3,1
Housing	Stainless steel

#### Contacts

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