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## RFID 256-bit EEPROM Memory



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### Distinctive Features & Characteristics:

- 256x1 bit density
- Endurance cycle: 1,500,000 cycles
- Data retention: > 10 years
- Voltage range: 1.8 V – 5.5 V
- Low standby current (< 1 uA @ 3.6 V)
- Low write current (max. = 40 uA @ 3.6 V)
- Low read current (max. = 10 uA @ 3.6 V)

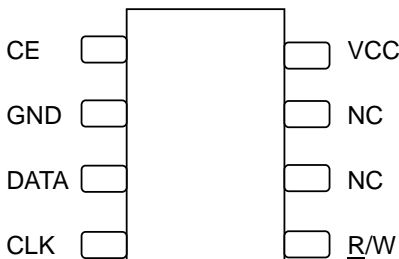
## Pin Diagram / Pin Layout

The following table contains a pin description of the different signals. Most of the signals are used for input except the DATA pin, which can also be used for output during read mode. The R/W pin selects between read and write mode.

Signals	Name	Input / Output	Description
1	CE	Input	Chip Enable
2	GND	Input	Ground
3	DATA	Input / Output	Data input / output
4	CLK	Input	Clock input
5	<u>R/W</u>	Input	<u>R/W</u> =0: Read operation <u>R/W</u> =1: Write operation
6	VCC	Input	Vcc

Table 1: Pin description

The pin layout is shown below:



## Description

### Power-on Reset

When the chip is being powered-on, the CE signal should be initially grounded to reset the chip. The CE signal should remain LOW during the power-on sequence until the Vcc supply has completely stabilized.

### Write

To write data into the 256-bit memory, the CE pin should be pulled HIGH to enable the chip. The R/W signal should also be pulled HIGH to enable write mode. Data is loaded on the RISING edge of the clock, so sufficient setup time is required before issuing a pulse.