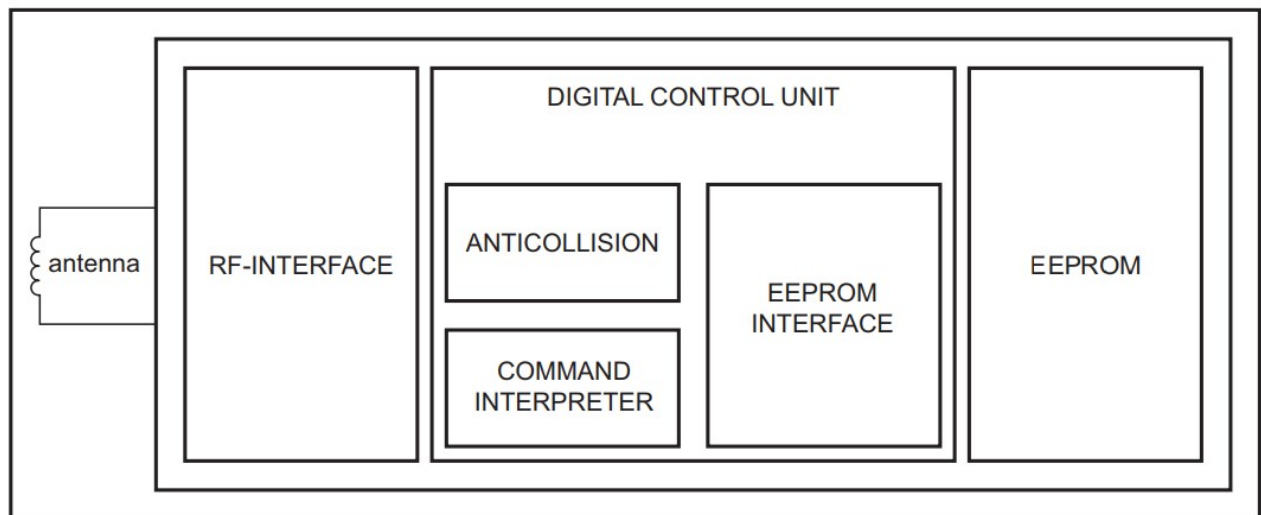


## I、performance parameter

1. Chip: NTag 213
2. Operating Frequency : 13.56MHz
- 3 . Communication rate : 106Kbit/s
4. Size: 6x16.5mm , Antenna board thickness 0.13mm
5. Standard : 14443A , 180Byte
- 6 Frequency : 100000 times
7. Service life : 10 Years
8. Read range : 1~2CM
- 9 . Data read and write time less than 100ms
10. Operation temperature : -10~85

## II、Function Description

# schematic diagram



### III、Function Description

# EEPROM memory structure

| Page Adr |     | Byte number within a page |          |            |            | Description                             |
|----------|-----|---------------------------|----------|------------|------------|-----------------------------------------|
| Dec      | Hex | 0                         | 1        | 2          | 3          |                                         |
| 0        | 0h  | serial number             |          |            |            | Manufacturer data and static lock bytes |
| 1        | 1h  | serial number             |          |            |            |                                         |
| 2        | 2h  | serial number             | internal | lock bytes | lock bytes | Capability Container                    |
| 3        | 3h  | Capability Container (CC) |          |            |            |                                         |
| 4        | 4h  | user memory               |          |            |            | User memory pages                       |
| 5        | 5h  |                           |          |            |            |                                         |
| ...      | ... |                           |          |            |            |                                         |
| 38       | 26h |                           |          |            |            |                                         |
| 39       | 27h |                           |          |            |            |                                         |
| 40       | 28h | dynamic lock bytes        |          |            | RFUI       | Dynamic lock bytes                      |
| 41       | 29h | CFG 0                     |          |            |            | Configuration pages                     |
| 42       | 2Ah | CFG 1                     |          |            |            |                                         |
| 43       | 2Bh | PWD                       |          |            |            |                                         |
| 44       | 2Ch | PACK                      |          | RFUI       |            |                                         |

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**Fig 5. Memory organization NTAG213**

## IV、Testing Parameters

### limit parameter

| symbol    | parameter                  | Test conditions | range       | unit   |
|-----------|----------------------------|-----------------|-------------|--------|
| Tstg      | Storage Temperature Range  |                 | -55--- +140 | ℃      |
| T         | JT0                        |                 | -55--- +140 | ℃      |
| VESD      | ESD voltage                | -STD-<br>883D   | ± ±2        | kVpeak |
| ImaxLA-LB | Maximum input peak current |                 | 30          | mApeak |

### operation parameters

| symbol | parameter           | test conditions | minimum value | typical value | Maximum value | unit  |
|--------|---------------------|-----------------|---------------|---------------|---------------|-------|
| Tjop   | JT0                 |                 | -25           |               | +85           | ℃     |
| ILA-LB | Input Current       |                 |               |               | 30            | mArms |
| Fop    | Operating Frequency |                 |               | 13. 56        | 14. 50        | MHZ   |
| Q值     | quality factor      |                 |               | 28            |               |       |

## V、Product image

