

64 bytes EEPROM Memory Contactless Smart Card Conform to ISO/IEC 14443A Standard

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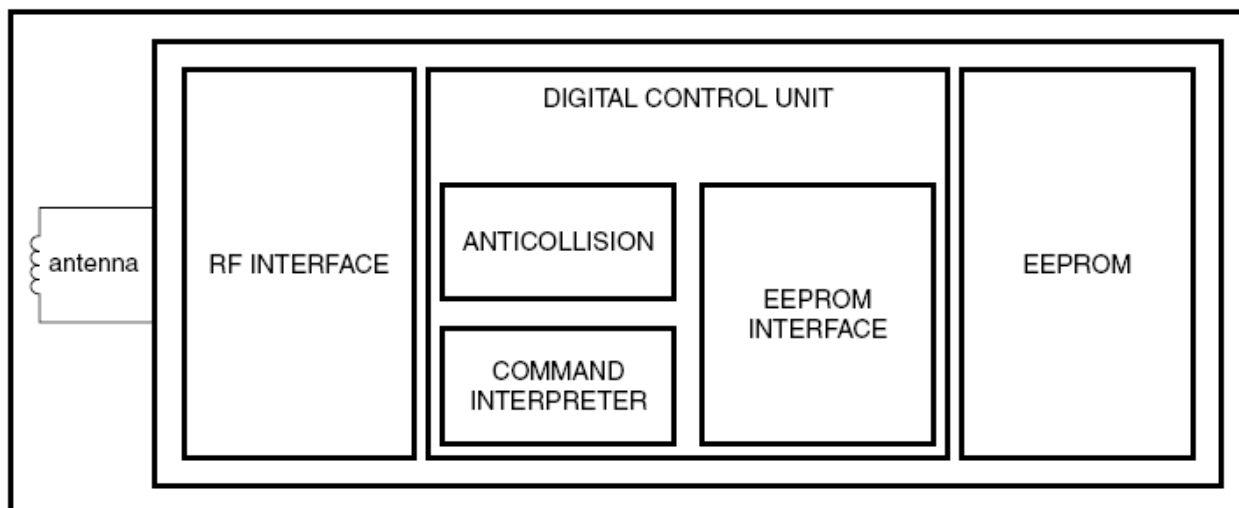
1. Features

- Conform to ISO/IEC 14443A standard
- Contactless transmission of data and supply energy
- Up to 100mm operation distance
- 13.56MHz operating frequency
- 106 kbit/s data transfer rate
- High data integrity: 16-bit CRC, parity, bit coding, bit counting
- Anticollision
- 7 byte serial number (cascade level 2 according to ISO/IEC 14443-3)
- 64 bytes EEPROM memory, divided in 16 pages (4 bytes per page)
- 48 bytes user Read/Write EEPROM
- Field programmable read-only locking function per page
- 32-bit user definable One-Time Programmable (OTP) area
- Data retention > 25 years
- Write endurance > 500,000 cycle
- Operation temperature range -25°C to +70°C

2. General Description

GT23SC4479 is 64 bytes EEPROM Contactless IC - to be used with Proximity Coupling Devices (PCD) according to ISO/IEC 14443A. GT23SC4479 is primarily designed for use with single trip tickets in public transportation networks, loyalty cards or day passes for events.

3. Block diagram



4. Package Pin Description

Pin	Symbol	Description
pin1	LA	Antenna connection LA
pin2	LB	Antenna connection LB

5. Memory Organization

Page address		Byte number			
Decimal	Hex	0	1	2	3
0	00h	serial number			
1	01h	serial number			
2	02h	serial number	internal	lock bytes	lock bytes
3	03h	OTP	OTP	OTP	OTP
4 to 15	04h to 0Fh	user memory			

6. Limiting Values

PARAMETER	CONDITIONS	Min	Max	Unit
Input current		-	30	mA
Input capacitance	17 pF version	14	18	pF
Storage temperature		-55	+125	°C
Operation temperature		-25	+70	°C
ESD	Measured on pin LA-LB	2	-	kV

7. Electrical Characteristics

PARAMETER	CONDITIONS	Min	Typ	Max
Operating frequency		-	13.56MHz	-
Write EE cycle time			4 ms	
EE retention time	Operation temperature 22°C	25 year	-	-
EE write endurance	Operation temperature 22°C	500000 cycle	-	-

8. Ordering Information

Part Number

GT23SC4479-MH001WBD

GT23SC4479-MH001SBD

GT23SC4479-MH001P

GT23SC4479-X20MH001

Package

Wafer

Bumping Wafer

COB

MOA4

9. Revision History

<i>REV</i>	<i>History</i>	<i>Page</i>	<i>Date</i>
1.0	Initial Version	--	18/4/2014

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