

RFID Privacy Capability Statement for passive UHF integrated circuits (chip)

Product details for the RFID integrated circuit (chip)

Manufacturer	
Product commercial reference	
Product type reference (if different from the commercial reference)	
Form completed by (company, if different from the manufacturer)	
Form completed by (person)	
Complies with standard (please tick relevant standards)	Complies with: ✓ box
ISO/IEC 18000-63:2013	
ISO/IEC 18000-6: 2010 Type C	
ISO/IEC 18000-6:2004/ Amd 1:2006 Type C	
GS1 EPC UHF Air Interface Protocol Standard "Gen2v2"	
GS1 EPC UHF Class 1 Gen 2 Standard v. 1.2.0	
GS1 EPC UHF Class 1 Gen 2 Standard v. 1.1.0	
GS1 EPC UHF Class 1 Gen 2 Standard v. 1.0.9	
Frequency range	MHz to MHz
RFID commands supported by the integrated circuit (tick relevant commands)	Supported: ✓ box
<i>Select</i> Command code: (A)h	
<i>Req_RN</i> Command code: (C1)h	
<i>Read</i> Command code: (C2)h	
<i>Write</i> Command code: (C3)h	
<i>Kill</i> Command code: (C4)h	
<i>Lock</i> Command code: (C5)h	
<i>Access</i> Command code: (C6)h	
<i>BlockWrite</i> Command code: (C7)h	
<i>BlockErase</i> Command code: (C8)h	
<i>BlockPermalock</i> Command code: (C9)h	
<i>ReadBuffer</i> Command code: (D2)h	
<i>FileOpen</i> Command code: (D3)h	
<i>Challenge</i> Command code: (D4)h	
<i>Authenticate</i> Command code: (D5)h	
<i>SecureComm</i> Command code: (D6)h	
<i>AuthComm</i> Command code: (D7)h	
<i>18000-63 Handle Sensor</i> Command code: (D9)h	
<i>Untraceable</i> Command code: (E200)h	
<i>FileList</i> Command code: (E201)h	
<i>KeyUpdate</i> Command code: (E202)h	
<i>TagPrivilege</i> Command code: (E203)h	

<i>FilePrivilege</i>	Command code: (E204)h	
<i>FileSetup</i>	Command code: (E205)h	
Additional proprietary or custom commands supported by the integrated circuit. Please list below		
MB00: reserved memory (size in bits)		bits
MB01: Ull memory, excluding protocol and CRC words (size in bits)		bits
MB10: TID memory (size in bits)		bits
MB10: TID memory serialised	Yes	No
MB11: user memory (size in 16-bit words)		words

Privacy capability features supported by the RFID integrated circuit (chip)

Code	Privacy capability features supported by the standards	Supported: ✓ box
C-1	Password protection ^A (Access Command code (C6)h)	
C-4	Cryptographic protection (Authenticate command code (D5)h)	
C-5	Symmetric-key cryptography (Authenticate command code (D5)h)	
C-6	Public-key cryptography (Authenticate command code (D5)h)	
C-9	Reduced Read Range (Command code (E200)h)	
C-12	Kill (Command code: (C4)h)	
C-16	Write (Lock) protection (Command code (C5)h)	
C-17	Temporary write Lock protection (Command code (C5)h)	
C-18	Permanent (or Perma) write Lock protection (Command code: (C9)h)	
C-19	Verification using a password (Command code: (C6)h)	
C-26	Verification using the unique Tag ID ^B (Command code: (C2)h of MB10)	
C-50	Hide TID (Command code (E200)h)	
C-51	Hide EPC or UII serial number (Command code (E200)h)	
C-52	Hide the entire User Memory (Command code (E200)h)	
C-53	Read/Write protection of specific User Memory file (Command code: (E204)h)	
Additional proprietary features supported by the integrated circuit. Please list below. (eg. Chip selection with random number, reduce read range, ...)		

^A In ISO/IEC 18000-6:2004 Am1: 2006 the password only protects the reserved memory bank. The cover coding does not help in protecting the consumer privacy as it only applies for protecting the password.

^B For ISO/IEC 18000-6:2004 Am1: 2006, ISO/IEC 18000-63:2012 the TID may not be unique as this is not a requirement in the standard, however, most product vendors provide serialisation.