|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SW1 | SW2 | | Info/Warning/Error/Security | | Description | |
| 6 |  | | E | | Class not supported. | |
| 61 | — | | I | | Response bytes still available | |
| 61 | XX | | I | | Command successfully executed; ‘XX’ bytes of data are available and can be requested using GET RESPONSE. | |
| 62 | — | | W | | State of non-volatile memory unchanged | |
| 62 | 00 | | W | | No information given (NV-Ram not changed) | |
| 62 | 01 | | W | | NV-Ram not changed 1. | |
| 62 | 81 | | W | | Part of returned data may be corrupted | |
| 62 | 82 | | W | | End of file/record reached before reading Le bytes | |
| 62 | 83 | | W | | Selected file invalidated | |
| 62 | 84 | | W | | Selected file is not valid. FCI not formated according to ISO | |
| 62 | 85 | | W | | No input data available from a sensor on the card. No Purse Engine enslaved for R3bc | |
| 62 | A2 | | W | | Wrong R-MAC | |
| 62 | A4 | | W | | Card locked (during reset( )) | |
| 62 | CX | | W | | Counter with value x (command dependent) | |
| 62 | F1 | | W | | Wrong C-MAC | |
| 62 | F3 | | W | | Internal reset | |
| 62 | F5 | | W | | Default agent locked | |
| 62 | F7 | | W | | Cardholder locked | |
| 62 | F8 | | W | | Basement is current agent | |
| 62 | F9 | | W | | CALC Key Set not unblocked | |
| 62 | FX | | W | | – | |
| 62 | XX | | W | | RFU | |
| 63 | — | | W | | State of non-volatile memory changed | |
| 63 | 00 | | W | | No information given (NV-Ram changed) | |
| 63 | 81 | | W | | File filled up by the last write. Loading/updating is not allowed. | |
| 63 | 82 | | W | | Card key not supported. | |
| 63 | 83 | | W | | Reader key not supported. | |
| 63 | 84 | | W | | Plaintext transmission not supported. | |
| 63 | 85 | | W | | Secured transmission not supported. | |
| 63 | 86 | | W | | Volatile memory is not available. | |
| 63 | 87 | | W | | Non-volatile memory is not available. | |
| 63 | 88 | | W | | Key number not valid. | |
| 63 | 89 | | W | | Key length is not correct. | |
| 63 | C0 | | W | | Verify fail, no try left. | |
| 63 | C1 | | W | | Verify fail, 1 try left. | |
| 63 | C2 | | W | | Verify fail, 2 tries left. | |
| 63 | C3 | | W | | Verify fail, 3 tries left. | |
| 63 | CX | | W | | The counter has reached the value ‘x’ (0 = x = 15) (command dependent). | |
| 63 | F1 | | W | | More data expected. | |
| 63 | F2 | | W | | More data expected and proactive command pending. | |
| 63 | FX | | W | | – | |
| 63 | XX | | W | | RFU | |
| 64 | — | | E | | State of non-volatile memory unchanged | |
| 64 | 00 | | E | | No information given (NV-Ram not changed) | |
| 64 | 01 | | E | | Command timeout. Immediate response required by the card. | |
| 64 | XX | | E | | RFU | |
| 65 | — | | E | | State of non-volatile memory changed | |
| 65 | 00 | | E | | No information given | |
| 65 | 01 | | E | | Write error. Memory failure. There have been problems in writing or reading the EEPROM. Other hardware problems may also bring this error. | |
| 65 | 81 | | E | | Memory failure | |
| 65 | FX | | E | | – | |
| 65 | XX | | E | | RFU | |
| 66 | — | | S | |  | |
| 66 | 00 | | S | | Error while receiving (timeout) | |
| 66 | 01 | | S | | Error while receiving (character parity error) | |
| 66 | 02 | | S | | Wrong checksum | |
| 66 | 03 | | S | | The current DF file without FCI | |
| 66 | 04 | | S | | No SF or KF under the current DF | |
| 66 | 69 | | S | | Incorrect Encryption/Decryption Padding | |
| 66 | XX | | S | | – | |
| 67 | — | | E | |  | |
| 67 | 00 | | E | | Wrong length | |
| 67 | XX | | E | | length incorrect (procedure)(ISO 7816-3) | |
| 68 | — | | E | | Functions in CLA not supported | |
| 68 | 00 | | E | | No information given (The request function is not supported by the card) | |
| 68 | 81 | | E | | Logical channel not supported | |
| 68 | 82 | | E | | Secure messaging not supported | |
| 68 | 83 | | E | | Last command of the chain expected | |
| 68 | 84 | | E | | Command chaining not supported | |
| 68 | FX | | E | | – | |
| 68 | XX | | E | | RFU | |
| 69 | — | | E | | Command not allowed | |
| 69 | 00 | | E | | No information given (Command not allowed) | |
| 69 | 01 | | E | | Command not accepted (inactive state) | |
| 69 | 81 | | E | | Command incompatible with file structure | |
| 69 | 82 | | E | | Security condition not satisfied. | |
| 69 | 83 | | E | | Authentication method blocked | |
| 69 | 84 | | E | | Referenced data reversibly blocked (invalidated) | |
| 69 | 85 | | E | | Conditions of use not satisfied. | |
| 69 | 86 | | E | | Command not allowed (no current EF) | |
| 69 | 87 | | E | | Expected secure messaging (SM) object missing | |
| 69 | 88 | | E | | Incorrect secure messaging (SM) data object | |
| 69 | 8D | |  | | Reserved | |
| 69 | 96 | | E | | Data must be updated again | |
| 69 | E1 | | E | | POL1 of the currently Enabled Profile prevents this action. | |
| 69 | F0 | | E | | Permission Denied | |
| 69 | F1 | | E | | Permission Denied – Missing Privilege | |
| 69 | FX | | E | | – | |
| 69 | XX | | E | | RFU | |
| 6A | — | | E | | Wrong parameter(s) P1-P2 | |
| 6A | 00 | | E | | No information given (Bytes P1 and/or P2 are incorrect) | |
| 6A | 80 | | E | | The parameters in the data field are incorrect. | |
| 6A | 81 | | E | | Function not supported | |
| 6A | 82 | | E | | File not found | |
| 6A | 83 | | E | | Record not found | |
| 6A | 84 | | E | | There is insufficient memory space in record or file | |
| 6A | 85 | | E | | Lc inconsistent with TLV structure | |
| 6A | 86 | | E | | Incorrect P1 or P2 parameter. | |
| 6A | 87 | | E | | Lc inconsistent with P1-P2 | |
| 6A | 88 | | E | | Referenced data not found | |
| 6A | 89 | | E | | File already exists | |
| 6A | 8A | | E | | DF name already exists. | |
| 6A | F0 | | E | | Wrong parameter value | |
| 6A | FX | | E | | – | |
| 6A | XX | | E | | RFU | |
| 6B | — | | E | |  | |
| 6B | 00 | | E | | Wrong parameter(s) P1-P2 | |
| 6B | XX | | E | | Reference incorrect (procedure byte), (ISO 7816-3) | |
| 6C | — | | E | | Wrong length Le | |
| 6C | 00 | | E | | Incorrect P3 length. | |
| 6C | XX | | E | | Bad length value in Le; ‘xx’ is the correct exact Le | |
| 6D | — | | E | |  | |
| 6D | 00 | | E | | Instruction code not supported or invalid | |
| 6D | XX | | E | | Instruction code not programmed or invalid (procedure byte), (ISO 7816-3) | |
| 6E | — | | E | |  | |
| 6E | 00 | | E | | Class not supported | |
| 6E | XX | | E | | Instruction class not supported (procedure byte), (ISO 7816-3) | |
| 6F | — | | E | | Internal exception | |
| 6F | 00 | | E | | Command aborted – more exact diagnosis not possible (e.g., operating system error). | |
| 6F | FF | | E | | Card dead (overuse, …) | |
| 6F | XX | | E | | No precise diagnosis (procedure byte), (ISO 7816-3) | |
| 9- | — | |  | |  | |
| 90 | | 00 | | I | | Command successfully executed (OK). |
| 90 | | 04 | | W | | PIN not succesfully verified, 3 or more PIN tries left |
| 90 | | 08 | |  | | Key/file not found |
| 90 | | 80 | | W | | Unblock Try Counter has reached zero |
| 91 | | 00 | |  | | OK |
| 91 | | 01 | |  | | States.activity, States.lock Status or States.lockable has wrong value |
| 91 | | 02 | |  | | Transaction number reached its limit |
| 91 | | 0C | |  | | No changes |
| 91 | | 0E | |  | | Insufficient NV-Memory to complete command |
| 91 | | 1C | |  | | Command code not supported |
| 91 | | 1E | |  | | CRC or MAC does not match data |
| 91 | | 40 | |  | | Invalid key number specified |
| 91 | | 7E | |  | | Length of command string invalid |
| 91 | | 9D | |  | | Not allow the requested command |
| 91 | | 9E | |  | | Value of the parameter invalid |
| 91 | | A0 | |  | | Requested AID not present on PICC |
| 91 | | A1 | |  | | Unrecoverable error within application |
| 91 | | AE | |  | | Authentication status does not allow the requested command |
| 91 | | AF | |  | | Additional data frame is expected to be sent |
| 91 | | BE | |  | | Out of boundary |
| 91 | | C1 | |  | | Unrecoverable error within PICC |
| 91 | | CA | |  | | Previous Command was not fully completed |
| 91 | | CD | |  | | PICC was disabled by an unrecoverable error |
| 91 | | CE | |  | | Number of Applications limited to 28 |
| 91 | | DE | |  | | File or application already exists |
| 91 | | EE | |  | | Could not complete NV-write operation due to loss of power |
| 91 | | F0 | |  | | Specified file number does not exist |
| 91 | | F1 | |  | | Unrecoverable error within file |
| 92 | | 0x | | I | | Writing to EEPROM successful after ‘x’ attempts. |
| 92 | | 10 | | E | | Insufficient memory. No more storage available. |
| 92 | | 40 | | E | | Writing to EEPROM not successful. |
| 93 | | 01 | |  | | Integrity error |
| 93 | | 02 | |  | | Candidate S2 invalid |
| 93 | | 03 | | E | | Application is permanently locked |
| 94 | | 00 | | E | | No EF selected. |
| 94 | | 01 | |  | | Candidate currency code does not match purse currency |
| 94 | | 02 | |  | | Candidate amount too high |
| 94 | | 02 | | E | | Address range exceeded. |
| 94 | | 03 | |  | | Candidate amount too low |
| 94 | | 04 | | E | | FID not found, record not found or comparison pattern not found. |
| 94 | | 05 | |  | | Problems in the data field |
| 94 | | 06 | | E | | Required MAC unavailable |
| 94 | | 07 | |  | | Bad currency : purse engine has no slot with R3bc currency |
| 94 | | 08 | |  | | R3bc currency not supported in purse engine |
| 94 | | 08 | | E | | Selected file type does not match command. |
| 95 | | 80 | |  | | Bad sequence |
| 96 | | 81 | |  | | Slave not found |
| 97 | | 00 | |  | | PIN blocked and Unblock Try Counter is 1 or 2 |
| 97 | | 02 | |  | | Main keys are blocked |
| 97 | | 04 | |  | | PIN not succesfully verified, 3 or more PIN tries left |
| 97 | | 84 | |  | | Base key |
| 97 | | 85 | |  | | Limit exceeded – C-MAC key |
| 97 | | 86 | |  | | SM error – Limit exceeded – R-MAC key |
| 97 | | 87 | |  | | Limit exceeded – sequence counter |
| 97 | | 88 | |  | | Limit exceeded – R-MAC length |
| 97 | | 89 | |  | | Service not available |
| 98 | | 02 | | E | | No PIN defined. |
| 98 | | 04 | | E | | Access conditions not satisfied, authentication failed. |
| 98 | | 35 | | E | | ASK RANDOM or GIVE RANDOM not executed. |
| 98 | | 40 | | E | | PIN verification not successful. |
| 98 | | 50 | | E | | INCREASE or DECREASE could not be executed because a limit has been reached. |
| 98 | | 62 | | E | | Authentication Error, application specific (incorrect MAC) |
| 99 | | 00 | |  | | 1 PIN try left |
| 99 | | 04 | |  | | PIN not succesfully verified, 1 PIN try left |
| 99 | | 85 | |  | | Wrong status – Cardholder lock |
| 99 | | 86 | | E | | Missing privilege |
| 99 | | 87 | |  | | PIN is not installed |
| 99 | | 88 | |  | | Wrong status – R-MAC state |
| 9A | | 00 | |  | | 2 PIN try left |
| 9A | | 04 | |  | | PIN not succesfully verified, 2 PIN try left |
| 9A | | 71 | |  | | Wrong parameter value – Double agent AID |
| 9A | | 72 | |  | | Wrong parameter value – Double agent Type |
| 9D | | 05 | | E | | Incorrect certificate type |
| 9D | | 07 | | E | | Incorrect session data size |
| 9D | | 08 | | E | | Incorrect DIR file record size |
| 9D | | 09 | | E | | Incorrect FCI record size |
| 9D | | 0A | | E | | Incorrect code size |
| 9D | | 10 | | E | | Insufficient memory to load application |
| 9D | | 11 | | E | | Invalid AID |
| 9D | | 12 | | E | | Duplicate AID |
| 9D | | 13 | | E | | Application previously loaded |
| 9D | | 14 | | E | | Application history list full |
| 9D | | 15 | | E | | Application not open |
| 9D | | 17 | | E | | Invalid offset |
| 9D | | 18 | | E | | Application already loaded |
| 9D | | 19 | | E | | Invalid certificate |
| 9D | | 1A | | E | | Invalid signature |
| 9D | | 1B | | E | | Invalid KTU |
| 9D | | 1D | | E | | MSM controls not set |
| 9D | | 1E | | E | | Application signature does not exist |
| 9D | | 1F | | E | | KTU does not exist |
| 9D | | 20 | | E | | Application not loaded |
| 9D | | 21 | | E | | Invalid Open command data length |
| 9D | | 30 | | E | | Check data parameter is incorrect (invalid start address) |
| 9D | | 31 | | E | | Check data parameter is incorrect (invalid length) |
| 9D | | 32 | | E | | Check data parameter is incorrect (illegal memory check area) |
| 9D | | 40 | | E | | Invalid MSM Controls ciphertext |
| 9D | | 41 | | E | | MSM controls already set |
| 9D | | 42 | | E | | Set MSM Controls data length less than 2 bytes |
| 9D | | 43 | | E | | Invalid MSM Controls data length |
| 9D | | 44 | | E | | Excess MSM Controls ciphertext |
| 9D | | 45 | | E | | Verification of MSM Controls data failed |
| 9D | | 50 | | E | | Invalid MCD Issuer production ID |
| 9D | | 51 | | E | | Invalid MCD Issuer ID |
| 9D | | 52 | | E | | Invalid set MSM controls data date |
| 9D | | 53 | | E | | Invalid MCD number |
| 9D | | 54 | | E | | Reserved field error |
| 9D | | 55 | | E | | Reserved field error |
| 9D | | 56 | | E | | Reserved field error |
| 9D | | 57 | | E | | Reserved field error |
| 9D | | 60 | | E | | MAC verification failed |
| 9D | | 61 | | E | | Maximum number of unblocks reached |
| 9D | | 62 | | E | | Card was not blocked |
| 9D | | 63 | | E | | Crypto functions not available |
| 9D | | 64 | | E | | No application loaded |
| 9E | | 00 | |  | | PIN not installed |
| 9E | | 04 | |  | | PIN not succesfully verified, PIN not installed |
| 9F | | 00 | |  | | PIN blocked and Unblock Try Counter is 3 |
| 9F | | 04 | |  | | PIN not succesfully verified, PIN blocked and Unblock Try Counter is 3 |
| 9F | | XX | |  | | Command successfully executed; ‘xx’ bytes of data are available and can be requested using GET RESPONSE. |
| 9x | | XX | |  | | Application related status, (ISO 7816-3) |