

For the test results of this modification, use the results of pm3 hf sea, hf 14a info, hf mfu info, and hf mfu dump respectively.

Menu

Menu

Fuse Tool	1
4B S70 (M4-4b)	2
7B S50(M1-7b)	3
7B S70(M4-7b)	4
Ultralight.....	5
Ultralight EV1.....	7
NTAG21X.....	10
Ultralight-C.....	14

FuseTool

Port: D8-USB Connect

System Log: Clear Log

Presets

- 4B S20
- 4B S50
- 4B S70
- 7B S20
- 7B S50
- 7B S70
- Ultralight
- Ultralight EV1
- NTAG21x
- UltralightC

Custom

ATQA: 0002 SAK: 18

4bit 7bit 10bit

Ultralight mode EV1

Shadow Mode: IGNORE (as normal)

ATS len: 09 Write Block 0

ATS dat: 0978009102DABC191010111213141516

Block 0: 00000000000000011778185BA18000000

Bk Fwd: 00000000

Start Stop

Finished: 0

SendTo: cf0000000c6 TestSend TestAuto

4B S70 (M4-4b)

```
C:\Windows\system32\cmd.exe
[usb] pm3 -->
[usb] pm3 --> hf sea
[-] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44
[+] ATQA: 00 02
[+] SAK: 18 [2]
[+] Possible types:
[+] MIFARE Classic 4K
[+] ----- ATS -----
[+] --> SAK incorrectly claims that card doesn't support RATS <--
[+] ATS: 09 78 00 91 02 DA BC 19 10 [ 05 00 ]
[+] 09..... TL length is 9 bytes
[+] 78..... T0 TAL is present, TB1 is present, TC1 is present, FSC1 is 8 (FSC = 256)
[+] 00..... TA1 different divisors are supported, DR: [], DS: []
[+] 91..... TB1 SFGI = 1 (SFGT = 8192/fc), FWI = 9 (FWT = 2097152/fc)
[+] 02... TC1 NAD is NOT supported, CID is supported
[+] ----- Historical bytes -----
[+] DABC1910
[+] Magic capabilities : Gen 2 / CUID
[+] Prng detection: weak
[+] Auth error
[+] Hint: try `hf mf` commands
[+] Valid ISO 14443-A tag found
[usb] pm3 --> hf 14a in
[+] UID: 11 22 33 44
[+] ATQA: 00 02
[+] SAK: 18 [2]
[+] Possible types:
[+] MIFARE Classic 4K
[+] ----- ATS -----
[+] --> SAK incorrectly claims that card doesn't support RATS <--
[+] ATS: 09 78 00 91 02 DA BC 19 10 [ 05 00 ]
[+] 09..... TL length is 9 bytes
[+] 78..... T0 TAL is present, TB1 is present, TC1 is present, FSC1 is 8 (FSC = 256)
[+] 00..... TA1 different divisors are supported, DR: [], DS: []
[+] 91..... TB1 SFGI = 1 (SFGT = 8192/fc), FWI = 9 (FWT = 2097152/fc)
[+] 02... TC1 NAD is NOT supported, CID is supported
[+] ----- Historical bytes -----
[+] DABC1910
[+] Magic capabilities : Gen 2 / CUID
[+] Prng detection: weak
[+] Auth error
[+] Hint: try `hf mf` commands
[usb] pm3 --> _
```

7B S50(M1-7b)

```
[usb] pm3 --> hf sea
[/] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 08 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
[=] proprietary non isol4443-4 card found, RATS not supported
[+] Prng detection: weak
[#] Auth error
[?] Hint: try `hf mf` commands

[+] Valid ISO 14443-A tag found

[usb] pm3 --> hf 14a in

[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 08 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
[=] proprietary non isol4443-4 card found, RATS not supported
[+] Prng detection: weak
[#] Auth error
[?] Hint: try `hf mf` commands

[usb] pm3 --> _
```

7B S70(M4-7b)

```
[usb] pm3 --> hf sea
[+] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 42
[+] SAK: 18 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
[+] ----- ATS -----
[+] --> SAK incorrectly claims that card doesn't support RATS <--
[+] ATS: 09 78 00 91 02 DA BC 19 10 [ 05 00 ]
[+] 09..... TL length is 9 bytes
[+] 78..... T0 TA1 is present, TB1 is present, TC1 is present, FSC1 is 8 (FSC = 256)
[+] 00..... TA1 different divisors are supported, DR: [], DS: []
[+] 91..... TB1 SFGI = 1 (SFGT = 8192/fc), FWI = 9 (FWT = 2097152/fc)
[+] 02... TC1 NAD is NOT supported, CID is supported
[+] ----- Historical bytes -----
[+] DABC1910
[+] Magic capabilities : Gen 2 / CUID
[+] Prng detection: weak
[+] Auth error
[+] Hint: try `hf mf` commands

[+] Valid ISO 14443-A tag found

[usb] pm3 --> hf 14a in
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 42
[+] SAK: 18 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
[+] ----- ATS -----
[+] --> SAK incorrectly claims that card doesn't support RATS <--
[+] ATS: 09 78 00 91 02 DA BC 19 10 [ 05 00 ]
[+] 09..... TL length is 9 bytes
[+] 78..... T0 TA1 is present, TB1 is present, TC1 is present, FSC1 is 8 (FSC = 256)
[+] 00..... TA1 different divisors are supported, DR: [], DS: []
[+] 91..... TB1 SFGI = 1 (SFGT = 8192/fc), FWI = 9 (FWT = 2097152/fc)
[+] 02... TC1 NAD is NOT supported, CID is supported
[+] ----- Historical bytes -----
[+] DABC1910
[+] Magic capabilities : Gen 2 / CUID
[+] Prng detection: weak
[+] Auth error
[+] Hint: try `hf mf` commands

[usb] pm3 -->
```

Ultralight

```
C:\Windows\system32\cmd.exe
[?] Hint: try `hf mf` commands

[usb] pm3 --> hf sea
[\] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44 1c 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to rduid

ulevl_getVersion Len:-1

do UL_C check first...

ulc_requestAuthentication:-1

[!] ntag203 read:1

[!] ul_fudan_check1

[+] TYPE: MIFARE Ultralight (MFOICU1)
[+] MIFARE Ultralight/C/NTAG Compatible
[+] ----- ATS -----
[+] --> SAK incorrectly claims that card doesn't support RATS <--
[+] ATS: 09 78 00 91 02 DA BC 19 10 [ 05 00 ]
[+] 09..... TL length is 9 bytes
[+] 78..... T0 TAL is present, TB1 is present, TC1 is present, FSCI is 8 (FSC = 256)
[+] 00..... T1 different divisors are supported, DR: [], DS: []
[+] 91..... TB1 SPGI = 1 (SPGI = 8192/fc), FWI = 9 (FWI = 2097152/fc)
[+] 02... TC1 NAD is NOT supported, CID is supported

[+] ----- Historical bytes -----
[+] DABC1910
[+] Magic capabilities : Gen 2 / CUID
[?] Hint: try `hf mf info`

[+] Valid ISO 14443-A tag found

[usb] pm3 --> hf 14a in

[+] UID: 11 22 33 44 1c 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to rduid

ulevl_getVersion Len:-1
```

```
C:\Windows\system32\cmd.exe
do UL_C check first...

ulc_requestAuthentication:-1

[!] ntag203 read:1

[!] ul_fudan_check1

[+] TYPE: MIFARE Ultralight (MFOICU1)
[+] MIFARE Ultralight/C/NTAG Compatible
[+] ----- ATS -----
[+] --> SAK incorrectly claims that card doesn't support RATS <--
[+] ATS: 09 78 00 91 02 DA BC 19 10 [ 05 00 ]
[+] 09..... TL length is 9 bytes
[+] 78..... TO TAL is present, TB1 is present, TC1 is present, FSCI is 8 (FSC = 256)
[+] 00..... TAl different divisors are supported, DR: [], DS: []
[+] 91..... TB1 SFGI = 1 (SFGT = 8192/fc), FWI = 9 (FWT = 2097152/fc)
[+] 02... TC1 NAD is NOT supported, CID is supported

[+] ----- Historical bytes -----
[+] DABC1910
[+] Magic capabilities : Gen 2 / CUID
[?] Hint: try `hf mfu info`

[usb] pm3 --> hf mfu in
continue to rduid

ulevl_getVersion Len:-1

do UL_C check first...

ulc_requestAuthentication:-1

[!] ntag203 read:1

[!] ul_fudan_check1

[+] --- Tag Information ---
[+] -----
[+] TYPE: MIFARE Ultralight (MFOICU1)
[+] UID: 11 22 33 44 1c 00 00
[+] UID[0]: 11, Emosyn-EM Microelectronics USA
[+] Blocks 0-2: 11 22 33 44 00 00 00 00 00 00 00 00
[+] Lock: 00 00 - 00
[+] OneTimePad: FF FF FF FF - ////
[+] ----- Fingerprint -----
[+] Reading tag memory...
[+] -----

[usb] pm3 --> _
```

```

C:\Windows\system32\cmd.exe

ulev1_getVersion Len:-1
do UL_C check first...
ulc_requestAuthentication:-1
[!] ntag203 read:1
[!] ul_fudan_check1
[+] TYPE: MIFARE Ultralight (MFOICU1)
[+] Reading tag memory...
[+] MFU dump file information
-----
      Version | 00 00 00 00 00 00 00 00
      TBD 0   | 00 00
      TBD 1   | 00
      Signature | 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
      Counter 0 | 00 00 00
      Tearing 0 | 00
      Counter 1 | 00 00 00
      Tearing 1 | 00
      Counter 2 | 00 00 00
      Tearing 2 | 00
      Max data page | 14 (60 bytes)
      Header size  | 56
-----
block# | data | lck | ascii
-----|-----|-----|-----
0/0x00 | 11 22 33 44 |  | ."3D
1/0x01 | 00 00 00 00 |  | ....
2/0x02 | 00 00 00 00 |  | ....
3/0x03 | FF FF FF FF | 0 | ....
4/0x04 | 00 00 00 00 | 0 | ....
5/0x05 | 00 00 00 00 | 0 | ....
6/0x06 | 00 00 00 00 | 0 | ....
7/0x07 | FF FF FF FF | 0 | ....
8/0x08 | 00 00 00 00 | 0 | ....
9/0x09 | 00 00 00 00 | 0 | ....
10/0x0A | 00 00 00 00 | 0 | ....
11/0x0B | FF FF FF FF | 0 | ....
12/0x0C | 00 00 00 00 | 0 | ....
13/0x0D | 00 00 00 00 | 0 | ....
14/0x0E | 00 00 00 00 | 0 | ....
15/0x0F | FF FF FF FF | 0 | ....

[-] Using UID as filename
[-] saved 120 bytes to binary file hf-mf1-11223300000000-dump-39. bin
[-] saved to json file hf-mf1-11223300000000-dump-39. json
[usb] pm3 -->

```

Ultralight EV1

```

C:\Windows\system32\cmd.exe

[usb] pm3 --> hf sea
[-] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to ruid

ulev1_getVersion Len:10

[+] TYPE: MIFARE Ultralight EV1 48bytes (MFOUL1101) ( magic )
[+] MIFARE Ultralight/C/NTAG Compatible
[-] proprietary non iso14443-4 card found, RATS not supported
[+] Magic capabilities : NTAG21x
[?] Hint: try 'hf mfu info'

[+] Valid ISO 14443-A tag found

```



```
C:\Windows\system32\cmd.exe

[=] --- Tag Information -----
[+] -----
[+] TYPE: MIFARE Ultralight EV1 48bytes (MFOUL1101) ( magic )
[+] UID: 11 22 33 44 1C 00 00
[+] UID[0]: 11, Emosyn-EM Microelectronics USA
[+] Blocks 0-2: 11 22 33 44 00 00 00 00 00 00 00 00
[+] Lock: 00 00 - 00
[+] OneTimePad: FF FF FF FF - ///

[=] --- Tag Counters

[=] --- Tag Signature
[+] Elliptic curve parameters: NID_secp128r1
[+] TAG IC Signature: A18079488B76F413CB94BA4683ACDFFF6051E328613A872B9B3F4FAAB998C5E5
[+] Signature verification ( fail )

[=] --- Tag Version
[+] Raw bytes: 00 04 03 01 01 00 0B 03
[+] Vendor ID: 04, NXP Semiconductors Germany
[+] Product type: 03, Ultralight
[+] Product subtype: 01, 17 pF
[+] Major version: 01
[+] Minor version: 00
[+] Size: 0B, (64 <-> 32 bytes)
[+] Protocol type: 03, ISO14443-3 Compliant

[=] --- Tag Configuration
[+] cfg0 [16/0x10]: 00 00 00 00
[+] - strong modulation mode disabled
[+] - page 0 and above need authentication
[+] cfg1 [17/0x11]: 00 00 00 00
[+] - Unlimited password attempts
[+] - NFC counter disabled
[+] - NFC counter not protected
[+] - user configuration writeable
[+] - write access is protected with password
[+] - 00, Virtual Card Type Identifier is not default
[+] PWD [18/0x12]: 00 00 00 00 - (cannot be read)
[+] PACK [19/0x13]: FF FF - (cannot be read)
[+] RFU [19/0x13]: FF FF - (cannot be read)

[+] --- Known EV1/NTAG passwords
[+] password not known
[+] Hint: try hf mfu pwdgen -r to get see known pwd gen algo suggestions
[+] ----- Fingerprint -----
[+] Reading tag memory...
[+] -----

[usb] pm3 --> _
```

```
C:\Windows\system32\cmd.exe
[usb] pm3 --> hf mfu du
continue to rduid

ulev1_getVersion Len:10
[+] TYPE: MIFARE Ultralight EV1 48bytes (MFOUL1101) ( magic )
[+] Reading tag memory...
MFU dump file information
-----
Version      00 04 03 01 01 00 0B 03
TBD 0        00 00
TBD 1        00
Signature    A1 80 79 48 8B 76 F4 13 CB 94 BA 46 83 AC DF FF 60 51 E3 28 61 3A 87 2B 9B 3F 4F AA B9 98 C5 E5
Counter 0    00 00 00
Tearing 0    00
Counter 1    00 00 00
Tearing 1    00
Counter 2    00 00 00
Tearing 2    00
Max data page 18 (76 bytes)
Header size  56
-----
block# | data | lck | ascii
-----|-----|-----|-----
0/0x00 | 11 22 33 44 | | ."3D
1/0x01 | 00 00 00 00 | | ....
2/0x02 | 00 00 00 00 | | ....
3/0x03 | FF FF FF FF | 0 | ....
4/0x04 | 00 00 00 00 | 0 | ....
5/0x05 | 00 00 00 00 | 0 | ....
6/0x06 | 00 00 00 00 | 0 | ....
7/0x07 | FF FF FF FF | 0 | ....
8/0x08 | 00 00 00 00 | 0 | ....
9/0x09 | 00 00 00 00 | 0 | ....
10/0x0A | 00 00 00 00 | 0 | ....
11/0x0B | FF FF FF FF | 0 | ....
12/0x0C | 00 00 00 00 | 0 | ....
13/0x0D | 00 00 00 00 | 0 | ....
14/0x0E | 00 00 00 00 | 0 | ....
15/0x0F | FF FF FF FF | 0 | ....
16/0x10 | 00 00 00 00 | 0 | ....
17/0x11 | 00 00 00 00 | 0 | ....
18/0x12 | 00 00 00 00 | 0 | ....
19/0x13 | 00 00 FF FF | 0 | ....
-----
[+] Using UID as filename
[+] saved 136 bytes to binary file hf-mf11223300000000-dump-40. bin
[+] saved to json file hf-mf11223300000000-dump-40. json
[usb] pm3 -->
```

NTAG21X

```
C:\Windows\system32\cmd.exe
[+] saved 136 bytes to binary file hf-mf-11223300000000-dump-40. bin
[+] saved to json file hf-mf-11223300000000-dump-40. json
[usb] pm3 --> hf sea
[/] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to rduid

ulev1_getVersion Len:10

[+] TYPE: NTAG 216 888bytes (NT2H1611G0DU) ( magic )
[+] MIFARE Ultralight/C/NTAG Compatible
[=] proprietary non isol4443-4 card found, RATS not supported
[+] Magic capabilities : NTAG21x
[?] Hint: try `hf mf- info`

[+] Valid ISO 14443-A tag found

[usb] pm3 --> hf 14a in

[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to rduid

ulev1_getVersion Len:10

[+] TYPE: NTAG 216 888bytes (NT2H1611G0DU) ( magic )
[+] MIFARE Ultralight/C/NTAG Compatible
[=] proprietary non isol4443-4 card found, RATS not supported
[+] Magic capabilities : NTAG21x
[?] Hint: try `hf mf- info`

[usb] pm3 --> hf mf- in
continue to rduid

ulev1_getVersion Len:10

[=] --- Tag Information -----
[=] -----
[+] TYPE: NTAG 216 888bytes (NT2H1611G0DU) ( magic )
[+] UID: 11 22 33 44 1C 00 00
[+] UID[0]: 11, Emosyn-EM Microelectronics USA
[+] Blocks 0-2: 11 22 33 44 00 00 00 00 00 00 00 00
```

```
C:\Windows\system32\cmd.exe
[=] --- Tag Information -----
[+] TYPE: NTAG 216 888bytes (NT2H1611G0DU) ( magic )
[+] UID: 11 22 33 44 1C 00 00
[+] UID[0]: 11, Emosyn-EM Microelectronics USA
[+] Blocks 0-2: 11 22 33 44 00 00 00 00 00 00 00
[+] Lock: 00 00 - 00
[+] OneTimePad: FF FF FF FF - ////

[=] --- Tag Counter
[=] [02]: 00 00 00
[=] - 00 tearing ( fail )

[=] --- Tag Signature
[=] Elliptic curve parameters: NID_secp128r1
[=] TAG IC Signature: A18079488B76F413CB94BA4683ACDFFF6051E328613A872B9B3F4FAAB998C5E5
[+] Signature verification ( fail )

[=] --- Tag Version
[=] Raw bytes: 00 04 04 02 01 00 13 03
[=] Vendor ID: 04, NXP Semiconductors Germany
[=] Product type: 04, NTAG
[=] Product subtype: 02, 50pF
[=] Major version: 01
[=] Minor version: 00
[=] Size: 13, (1024 <-> 512 bytes)
[=] Protocol type: 03, ISO14443-3 Compliant

[=] --- Tag Configuration
[=] cfg0 [227/0xE3]: 00 00 00 00
[=] - strong modulation mode disabled
[=] - page 0 and above need authentication
[=] cfg1 [228/0xE4]: 00 00 00 00
[=] - Unlimited password attempts
[=] - NFC counter disabled
[=] - NFC counter not protected
[=] - user configuration writeable
[=] - write access is protected with password
[=] - 00, Virtual Card Type Identifier is not default
[=] PWD [229/0xE5]: 00 00 00 00 - (cannot be read)
[=] PACK [230/0xE6]: 00 00 - (cannot be read)
[=] RFU [230/0xE6]: 00 00 - (cannot be read)

[+] --- Known EV1/NTAG passwords
[!] password not known
[?] Hint: try `hf mfu pwdgen -r` to get see known pwd gen also suggestions
[=] ----- Fingerprint -----
[=] Reading tag memory...

[usb] pm3 --> _
```

```

C:\Windows\system32\cmd.exe
ulev1_getVersion Len:10
[+] TYPE: NTAG 216 888bytes (NT2H1611G0DU) ( magic )
Reading tag memory...
MFU dump file information
-----
Version      00 04 04 02 01 00 13 03
TBD 0        00 00
TBD 1        00
Signature    A1 80 79 48 8B 76 F4 13 CB 94 BA 46 83 AC DF FF 60 51 E3 28 61 3A 87 2B 9B 3F 4F AA B9 98 C5 E5
Counter 0    00 00 00
Tearing 0    00
Counter 1    00 00 00
Tearing 1    00
Counter 2    00 00 00
Tearing 2    00
Max data page 229 (920 bytes)
Header size  56
-----
block# | data | lck | ascii
-----|-----|-----|-----
0/0x00 | 11 22 33 44 |  | ."3D
1/0x01 | 00 00 00 00 |  | ....
2/0x02 | 00 00 00 00 |  | ....
3/0x03 | FF FF FF FF | 0 | ....
4/0x04 | 00 00 00 00 | 0 | ....
5/0x05 | 00 00 00 00 | 0 | ....
6/0x06 | 00 00 00 00 | 0 | ....
7/0x07 | FF FF FF FF | 0 | ....
8/0x08 | 00 00 00 00 | 0 | ....
9/0x09 | 00 00 00 00 | 0 | ....
10/0x0A | 00 00 00 00 | 0 | ....
11/0x0B | FF FF FF FF | 0 | ....
12/0x0C | 00 00 00 00 | 0 | ....
13/0x0D | 00 00 00 00 | 0 | ....
14/0x0E | 00 00 00 00 | 0 | ....
15/0x0F | FF FF FF FF | 0 | ....
16/0x10 | 00 00 00 00 | 0 | ....
17/0x11 | 00 00 00 00 | 0 | ....
18/0x12 | 00 00 00 00 | 0 | ....
19/0x13 | FF FF FF FF | 0 | ....
20/0x14 | 00 00 00 00 | 0 | ....
21/0x15 | 00 00 00 00 | 0 | ....
22/0x16 | 00 00 00 00 | 0 | ....
23/0x17 | FF FF FF FF | 0 | ....
24/0x18 | 00 00 00 00 | 0 | ....
25/0x19 | 00 00 00 00 | 0 | ....
26/0x1A | 00 00 00 00 | 0 | ....
27/0x1B | FF FF FF FF | 0 | ....
28/0x1C | 00 00 00 00 | 0 | ....

```

```
C:\Windows\system32\cmd.exe
[=] 185/0xB9 00 00 00 00 0 .....
[=] 186/0xBA 00 00 00 00 0 .....
[=] 187/0xBB 00 00 00 00 0 .....
[=] 188/0xBC 00 00 00 00 0 .....
[=] 189/0xBD 00 00 00 00 0 .....
[=] 190/0xBE 00 00 00 00 0 .....
[=] 191/0xBF FF FF FF FF 0 .....
[=] 192/0xC0 00 00 00 00 0 .....
[=] 193/0xC1 00 00 00 00 0 .....
[=] 194/0xC2 00 00 00 00 0 .....
[=] 195/0xC3 00 00 00 00 0 .....
[=] 196/0xC4 00 00 00 00 0 .....
[=] 197/0xC5 00 00 00 00 0 .....
[=] 198/0xC6 00 00 00 00 0 .....
[=] 199/0xC7 00 00 00 00 0 .....
[=] 200/0xC8 00 00 00 00 0 .....
[=] 201/0xC9 00 00 00 00 0 .....
[=] 202/0xCA 00 00 00 00 0 .....
[=] 203/0xCB 00 00 00 00 0 .....
[=] 204/0xCC 00 00 00 00 0 .....
[=] 205/0xCD 00 00 00 00 0 .....
[=] 206/0xCE 00 00 00 00 0 .....
[=] 207/0xCF FF FF FF FF 0 .....
[=] 208/0xD0 00 00 00 00 0 .....
[=] 209/0xD1 00 00 00 00 0 .....
[=] 210/0xD2 00 00 00 00 0 .....
[=] 211/0xD3 00 00 00 00 0 .....
[=] 212/0xD4 00 00 00 00 0 .....
[=] 213/0xD5 00 00 00 00 0 .....
[=] 214/0xD6 00 00 00 00 0 .....
[=] 215/0xD7 00 00 00 00 0 .....
[=] 216/0xD8 00 00 00 00 0 .....
[=] 217/0xD9 00 00 00 00 0 .....
[=] 218/0xDA 00 00 00 00 0 .....
[=] 219/0xDB 00 00 00 00 0 .....
[=] 220/0xDC 00 00 00 00 0 .....
[=] 221/0xDD 00 00 00 00 0 .....
[=] 222/0xDE 00 00 00 00 0 .....
[=] 223/0xDF FF FF FF FF 0 .....
[=] 224/0xE0 00 00 00 00 0 .....
[=] 225/0xE1 00 00 00 00 0 .....
[=] 226/0xE2 00 00 00 00 0 .....
[=] 227/0xE3 00 00 00 00 0 .....
[=] 228/0xE4 00 00 00 00 0 .....
[=] 229/0xE5 00 00 00 00 0 .....
[=] 230/0xE6 00 00 00 00 0 .....
[=] -----
[=] Using UID as filename
[+] saved 980 bytes to binary file hf-mf-11223300000000-dump-41. bin
[+] saved to json file hf-mf-11223300000000-dump-41. json
[usb] pm3 -->
```

Ultralight-C

```
C:\Windows\system32\cmd.exe
[=] Using UID as filename
[+] saved 980 bytes to binary file hf-mf11223300000000-dump-41. bin
[+] saved to json file hf-mf11223300000000-dump-41. json
[usb] pm3 --> hf sea
[!] Searching for ISO14443-A tag...
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to rduid

ulev1_getVersion Len:-1
do UL_C check first...

ulc_requestAuthentication:11
[+] TYPE: MIFARE Ultralight C (MFOULC) ( magic )
[+] MIFARE Ultralight/C/NTAG Compatible
[=] proprietary non isol4443-4 card found, RATS not supported
[+] Magic capabilities : NTAG21x
[?] Hint: try `hf mf1 info`

[+] Valid ISO 14443-A tag found
[usb] pm3 --> hf 14a in
[+] UID: 11 22 33 44 1C 00 00
[+] ATQA: 00 44
[+] SAK: 00 [2]
[+] MANUFACTURER: Emosyn-EM Microelectronics USA
[+] NTAG21x Modifiable
continue to rduid

ulev1_getVersion Len:-1
do UL_C check first...

ulc_requestAuthentication:11
[+] TYPE: MIFARE Ultralight C (MFOULC) ( magic )
[+] MIFARE Ultralight/C/NTAG Compatible
[=] proprietary non isol4443-4 card found, RATS not supported
[+] Magic capabilities : NTAG21x
[?] Hint: try `hf mf1 info`

[usb] pm3 --> hf mf1 du
continue to rduid
```



```

C:\Windows\system32\cmd.exe
[=] 17/0x11 00 00 00 00 0 .....
[=] 18/0x12 00 00 00 00 0 .....
[=] 19/0x13 FF FF FF FF 0 .....
[=] 20/0x14 00 00 00 00 0 .....
[=] 21/0x15 00 00 00 00 0 .....
[=] 22/0x16 00 00 00 00 0 .....
[=] 23/0x17 FF FF FF FF 0 .....
[=] 24/0x18 00 00 00 00 0 .....
[=] 25/0x19 00 00 00 00 0 .....
[=] 26/0x1A 00 00 00 00 0 .....
[=] 27/0x1B FF FF FF FF 0 .....
[=] 28/0x1C 00 00 00 00 0 .....
[=] 29/0x1D 00 00 00 00 0 .....
[=] 30/0x1E 00 00 00 00 0 .....
[=] 31/0x1F FF FF FF FF 0 .....
[=] 32/0x20 00 00 00 00 0 .....
[=] 33/0x21 00 00 00 00 0 .....
[=] 34/0x22 00 00 00 00 0 .....
[=] 35/0x23 FF FF FF FF 0 .....
[=] 36/0x24 00 00 00 00 0 .....
[=] 37/0x25 00 00 00 00 0 .....
[=] 38/0x26 00 00 00 00 0 .....
[=] 39/0x27 FF FF FF FF 0 .....
[=] 40/0x28 00 00 00 00 0 .....
[=] 41/0x29 00 00 00 00 0 .....
[=] 42/0x2A 00 00 00 00 0 .....
[=] 43/0x2B FF FF FF FF 0 .....
[=] 44/0x2C 00 00 00 00 0 .....
[=] 45/0x2D 00 00 00 00 0 .....
[=] 46/0x2E 00 00 00 00 0 .....
[=] 47/0x2F FF FF FF FF 0 .....
[=] -----
[=] Using UID as filename
[+] saved 248 bytes to binary file hf-mf11223300000000-dump-42. bin
[+] saved to json file hf-mf11223300000000-dump-42. json
[usb] pm3 --> hf mfu in
continue to rduid

ulev1_getVersion Len:-1

do UL_C check first...

ulc_requestAuthentication:11

[=] --- Tag Information -----
[=] -----
[+] TYPE: MIFARE Ultralight C (MFOULC) ( magic )
[+] UID: 11 22 33 44 1C 00 00
[+] UID[0]: 11, Emosyn-EM Microelectronics USA
[+] Blocks 0-2: 11 22 33 44 00 00 00 00 00 00 00 00

```

```
[=] --- Tag Information -----
[=] -----
[+] TYPE: MIFARE Ultralight C (MFOULC) ( magic )
[+] UID: 11 22 33 44 1C 00 00
[+] UID[0]: 11, Emosyn-EM Microelectronics USA
[+] Blocks 0-2: 11 22 33 44 00 00 00 00 00 00 00 00
[+] Lock: 00 00 - 00
[+] OneTimePad: FF FF FF FF - ////

--- UL-C Configuration
Higher Lockbits [40/0x28]: 00 00 00 00 - 00
Counter [41/0x29]: 00 00 00 00 - 00
Auth0 [42/0x2A]: 00 00 00 00 default
Auth1 [43/0x2B]: FF FF FF FF write access restricted
[=] deskey1 [44/0x2C]: 00 00 00 00 [....]
[=] deskey1 [45/0x2D]: 00 00 00 00 [....]
[=] deskey2 [46/0x2E]: 00 00 00 00 [....]
[=] deskey2 [47/0x2F]: FF FF FF FF [....]
[=] 3des key: 0000000000000000FFFFFFFF00000000
[=] ----- Fingerprint -----
[=] Reading tag memory...
[=] -----

[usb] pm3 --> _
```