CHAMELEON By Proxgrind

D. Appendix

1. FEATURE COMPARISON TABLE FOR EACH VERSION

	Rev.G Official By KAOS	Rev.E old RDV2.0 By PROXGRIND	Rev.G new RDV2.0 By PROXGRIND	Rev.G new TINY By PROXGRIND
Simulation	Good performance, has a blind area	Poor compatibility	Perfect performance no blind area	Perfect performance no blind area
As a reader	1-2cm for white tag 0cm for keyfob	×	5-6cm for white tag 3-4cm for keyfob	3-5cm for white tag 2-3cm for keyfob
Read current	170mA	×	65mA	60mA
BLE nrf52832	×	×	√	×
Li-ion battery	√	×	√	√
Battery indicator	×	×	√	×
Low power sleep	×	×	√	√
RF field wakeup	×	√	√	√
Button wakeup	×	√	√	√
Auto power off	×	√	√	√
Official firmware compatible	√	√	√	√
Replaceable Antenna	×	×	√	×
MFKEY32 crack	×	√	√	√
8 LED for slot	×	√	√	√
Android APP	×	×	√	√
Firmware drop during operation	×	×	√	×

[https://i2.wp.com/chameleontiny.com/wp-content/uploads/2020/03/Table-4.png]

2. COMPARISON TABLE ANALOG CARD CHARACTERISTIC

	Rev.G Official By KAOS	Rev.E old RDV2.0 By PROXGRIND	Rev.G new RDV2.0 By PROXGRIND	M1 white tag
122U r/w full data	1-2 sector only	Smooth	Smooth	Smooth
122U Range	61mm	41mm	73mm	71mm
PM3 r/w full data	1-2 sector only	Smooth	Smooth	Smooth
PM3 Range	57mm	74mm	88mm	89mm
Phone NFC r/w full data	No	Smooth	Smooth	Smooth
Phone NFC Range	25mm	18mm	33mm	32mm
Magic back door	By default	No	Dual mode	No
SAK ATQA Support	No	No	Modifiable	No

[https://i0.wp.com/chameleontiny.com/wp-content/uploads/2020/03/Table-5.png]

3. LIST OF NEW COMMANDS

Command	Effect range	Description
UIDMODE?	All slot	Returns the configuration of the all slot
UIDMODE=?	All slot	Returns a list of all supported configurations
UIDMODE=[0;1]	All slot	Activates(1)，deactivates(0)，the magic card mode(It will has Chinese magic card back door)
SAKMODE?	Current slot	Returns the configuration of the current slot
SAKMODE=?	Current slot	Returns a list of all supported configurations
SAKMODE=[0;1]	Current slot	Activates(1)，deactivates(0)，the real SAK ATQA mode (the SAK ATQA will be mapped from block 0)
CONFIG=MF_DETECTION_1K	Current slot	Set current slot to detection 1K mode. (It will record the key information as log in flash)
CONFIG=MF_DETECTION_4K	Current slot	Set current slot to detection 4K mode. (It will record the key information as log in flash)
DETECTION=0	Device	Clears the detection log memory
DETECTION?	Device	Wait for an XModem connection and then downloads the binary detection log data.

[https://i2.wp.com/chameleontiny.com/wp-content/uploads/2020/03/Table-6.png]

4. COMPLETE INSTRUCTION LIST

From the official:

https://rawgit.com/emsec/ChameleonMini/master/Doc/Doxygen/html/_page__command_lin
[https://rawgit.com/emsec/ChameleonMini/master/Doc/Doxygen/html/_page__command_lir

Or see the instruction sheet in the attachment.

5. SUPPORTED CARDS & ENCODING TYPES

From the official:

https://github.com/emsec/ChameleonMini/wiki/Supported-Cards-and–Codecs
[https://github.com/emsec/ChameleonMini/wiki/Supported-Cards-and--Codecs]

- **Simulation Support**

Card Type	Encoding Type	Whether the hardware supports	Does the software support	Whether the application layer supports	Note
Non13.56MHz		No	No	No	
Mifare Ultralight	ISO14443A 106 kbit/s	Support	Support	Support	
Mifare Ultralight Ev1	ISO14443A 106 kbit/s	Support	Support	Support	
MifareClassic 1K/4K 4B/7B	ISO14443A 106 kbit/s	Support	Support	Support	
Mifare DESFire	ISO14443A High Rate	Supports low rates, or possibly higher rates	Only supported Low rate	No	
Mifare DESFire EV1	ISO14443A High rate	Supports low rates, or possibly higher rates	Only supported Low rate	No	Backward compatible
Mifare DESFire EV2	ISO14443A High rate	Supports low rates, or possibly higher rates	Only supported Low rate	No	Backward compatible
Mifare PLUS	ISO14443A High rate	Supports low rates, or possibly higher rates	Only supported Low rate	No	
Sniff Mode NTAG	ISO14443A 106 kbit/s	Support	Support	No	
LEGIC prime	LEGICprime/ ISO14443A /ISO15693	Possible but not supported	Possible but not supported	No	
HID iCLASS	125kHz/ ISO15693 /ISO14443B	Possible but not supported	Possible but not supported	No	
Epass	ISO14443A/B	Supported / Supported	Low rate only / not supported	No	
ISO15693	ISO15693	Support	Support	No	

[https://i2.wp.com/chameleontiny.com/wp-content/uploads/2020/03/Table-Final.png]

- **Sniff Mode Support Type**

Encoding type	Whether the hardware supports	Does the software support	Whether the application layer supports	Note
Non-13.56MHz	Not Supported	Not Supported	Not Supported	
ISO 14443 A 106 kbit/s	Reader -> card Direction sniffing Maybe support the other direction	Currently only supported Reader -> card Direction sniffing	Support	

[https://i2.wp.com/chameleontiny.com/wp-content/uploads/2020/03/table-7.png]

- **Card Type Supported via Reading**

Card type	Encoding type	Whether the hardware stand by	Whether the software stand by	Whether the application layer supports	Note
Non13.56MHz		Not Supported	Not Supported	Not Supported	
Mifare Ultralight	ISO14443A 106 kbit/s	Support	Support	Support	Command: dump_mfu
MifareClassic 1K/4K 4B/7B	ISO14443A 106 kbit/s	Support	Support	Not Supported	No card reading instruction, encryption function has been implemented
Mifare DESFire	ISO14443A High rate	Supports low rates, or possibly higher rates	Only supported Low rate	Not Supported	No card reading instruction, the encryption function is being supported

[https://i2.wp.com/chameleontiny.com/wp-content/uploads/2020/03/Table-8.png]