

# flashrom\_build\_windows\_x64

flashrom Dreg's fork build for windows x64 buspirate\_spi ch347\_spi ch341a\_spi ft2232\_spi

<http://dangerousprototypes.com/forum/index.php?topic=10697>

Source code:

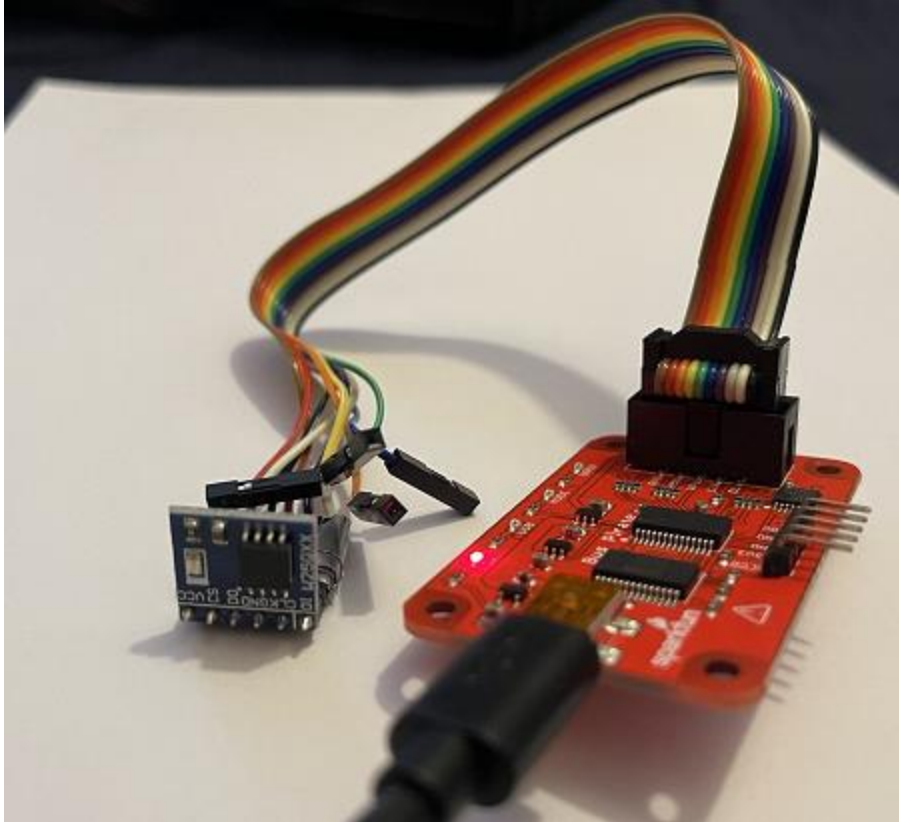
- <https://github.com/therealdreg/flashrom-dregmod>

**WARNING:** Using bus pirate + flashrom with Virtual Machines (VM) and/or USB Hubs can cause problems. It is advisable to ALWAYS use a native OS, and connect the Bus Pirate directly to a USB port. If bus pirate console freezes(~2 mins without output)/crash : close this program, reconnect USB port and try again

**WARNING:** I recommend using a speed of approximately 100kHz for each protocol as the maximum, since the quality of the cables is important and I do not trust that the length of yours is short, especially if there is an adapter to clips, etc. The longer the cable and the more adapters there are, coupled with lower voltage, the more you will need to use a lower speed

**WARNING:** USE SHORT HIGH-QUALITY USB CABLE

btw, **flashrom works better on Linux** ;-)



## Buzzpirat & Bus Pirate help

A required `dev` parameter specifies the Bus Pirate device node and an optional `spispeed` parameter specifies the frequency of the SPI bus. The parameter delimiter is a comma. Syntax is:

```
flashrom -p buspirate_spi:dev=/dev/device,spispeed=frequency
```

where `frequency` can be 30k, 125k, 250k, 1M, 2M, 2.6M, 4M or 8M (in Hz). The default is the maximum frequency of 8 MHz.

The baud rate for communication between the host and the Bus Pirate can be specified with the optional `serialspeed` parameter. Syntax is:

```
flashrom -p buspirate_spi:serialspeed=baud
```

where `baud` can be 115200, 230400, 250000 or 2000000 (2M). The default is 2M baud for Bus Pirate hardware version 3.0 and greater, and 115200 otherwise.

An optional `pullups` parameter specifies the use of the Bus Pirate internal pull-up resistors. This may be needed if you are working with a flash ROM chip that you have physically removed from the board. Syntax is:

```
flashrom -p buspirate_spi:pullups=state
```

where state can be on or off. More information about the Bus Pirate pull-up resistors and their purpose is available [in a guide by dangerousprototypes](#).

When working with low-voltage chips, the internal 10k pull-ups of the Bus Pirate might be too high. In such cases, it's necessary to create an external pull-up using lower-value resistors.

For this, you can use the `hiz` parameter. This way, the Bus Pirate will operate as an open drain. Syntax is:

```
flashrom -p buspirate_spi:hiz=state
```

where state can be on or off.

The state of the Bus Pirate power supply pins is controllable through an optional `psus` parameter. Syntax is:

```
flashrom -p buspirate_spi:psus=state
```

where state can be on or off. This allows the bus pirate to power the ROM chip directly. This may also be used to provide the required pullup voltage (when using the `pullups` option), by connecting the Bus Pirate's `Vpu` input to the appropriate `Vcc` pin. An optional `aux` parameter specifies the state of the Bus Pirate auxiliary pin. This may be used to drive the auxiliary pin high or low before a transfer. Syntax is:

```
flashrom -p buspirate_spi:aux=state
```

where state can be high or low. The default state is high.

## Compilation

```
meson setup builddir --wipe --prefer-static --clearcache --default-library static
meson compile -C builddir
```

## Best Firmware

Some firmwares have a bug in the binary SPI mode (like the latest community firmware) and cause problems with `flashrom`.

**I recommend using the latest Buzzpirat firmware for the Bus Pirate**

**v3:** <https://buzzpirat.com/docs/firmware-update/>

## Instructions

Install drivers

Use zadig if you have problems with usb detection (google is your friend: winusb <--> libusbk)

Try executing as Administrator

## Download

Download last release:

- <https://github.com/therealdreg/flashrom build windows x64/releases>

## Example of use buspirate\_spi COM6 W25Q64JV-.Q:

```
flashrom.exe --progress -V -c "W25Q64JV-.Q" -p buspirate_spi:dev=COM8 -r flash_content.img
```

If the above command doesn't work (freezes), reconnect the USB Bus Pirate, and try using a slow SPI + 115200 BAUDRATE instead:

```
flashrom.exe --progress -V -c "W25Q64BV/W25Q64CV/W25Q64FV" -p buspirate_spi:dev=COM8,spispeed=250k,serialspeed=115200 -r flash_content.img
```

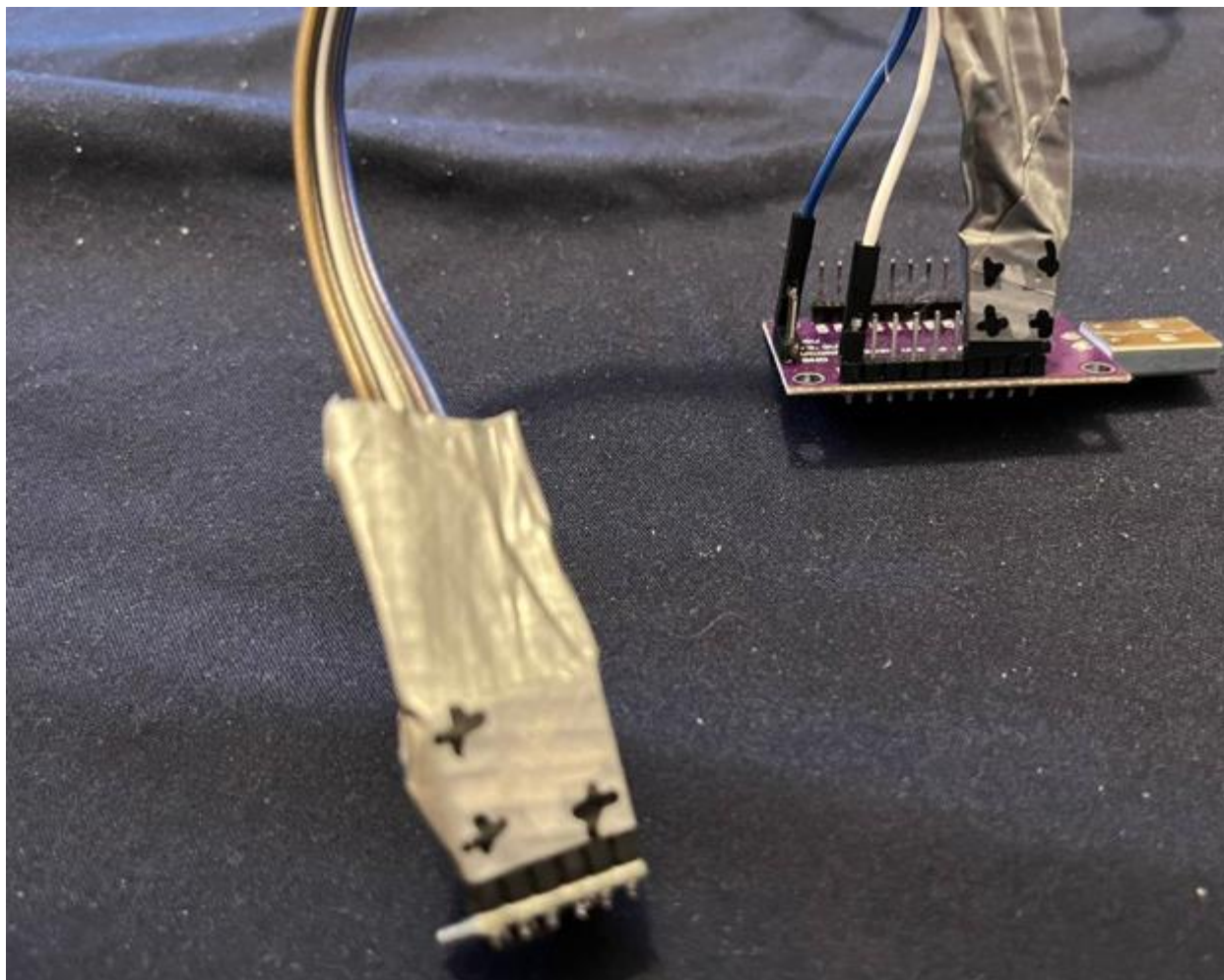
flashrom 1.4.0dev Built by Dreg rootkit.es --- on Windows 10.0 (x86\_64)  
flashrom is free software, get the source code at <https://flashrom.org>

```
Using clock_gettime for delay loops (clk_id: 1, resolution: 100ns).
flashrom was built with GCC 13.1.0, little endian
Command line (8 args): flashrom.exe --progress -V -c W25Q64BV/W25Q64CV/W25Q64FV -p buspirate_spi:dev=COM8,spispeed=250k,serialspeed=115200 -r flash_content.img
Initializing buspirate_spi programmer
Baud rate is 115200.
Detected Bus Pirate hardware 3.5
Detected Bus Pirate firmware 7.1
Using SPI command set v2.
SPI speed is 250kHz
Raw bitbang mode version 1
Raw SPI mode version 1
Driving AUX high.
The following protocols are supported: SPI.
Probing for Winbond W25Q64BV/W25Q64CV/W25Q64FV, 8192 kB: compare_id: id1 0xef, id2 0x4017
Added layout entry 00000000 - 007fffff named complete flash
Found Winbond flash chip "W25Q64BV/W25Q64CV/W25Q64FV" (8192 kB, SPI) on buspirate_spi.
Chip status register is 0x00.
This chip may contain one-time programmable memory. flashrom cannot read and may never be able to write it, hence it may not be able to completely clone the contents of this chip (see man page for details).
```

```
Reading flash... read_flash: region (00000000..0x7ffffff) is readable, reading range
(00000000..0x7ffffff).
[READ] 1% complete... [READ] 2% complete... [READ] 3% complete... [READ] 4%
complete... [READ] 5% complete... [READ] 6% complete... [READ] 7% complete... [READ]
8% complete... [READ] 9% complete... [READ] 10% complete... [READ] 11% complete...
[READ] 12% complete... [READ] 13% complete... [READ] 14% complete... [READ] 15%
complete... [READ] 16% complete... [READ] 17% complete... [READ] 18% complete...
[READ] 19% complete... [READ] 20% complete... [READ] 21% complete... [READ] 22%
complete... [READ] 23% complete... [READ] 24% complete... [READ] 25% complete...
[READ] 26% complete... [READ] 27% complete... [READ] 28% complete... [READ] 29%
complete... [READ] 30% complete... [READ] 31% complete... [READ] 32% complete...
[READ] 33% complete... [READ] 34% complete... [READ] 35% complete... [READ] 36%
complete... [READ] 37% complete... [READ] 38% complete... [READ] 39% complete...
[READ] 40% complete... [READ] 41% complete... [READ] 42% complete... [READ] 43%
complete... [READ] 44% complete... [READ] 45% complete... [READ] 46% complete...
[READ] 47% complete... [READ] 48% complete... [READ] 49% complete... [READ] 50%
complete... [READ] 51% complete... [READ] 52% complete... [READ] 53% complete...
[READ] 54% complete... [READ] 55% complete... [READ] 56% complete... [READ] 57%
complete... [READ] 58% complete... [READ] 59% complete... [READ] 60% complete...
[READ] 61% complete... [READ] 62% complete... [READ] 63% complete... [READ] 64%
complete... [READ] 65% complete... [READ] 66% complete... [READ] 67% complete...
[READ] 68% complete... [READ] 69% complete... [READ] 70% complete... [READ] 71%
complete... [READ] 72% complete... [READ] 73% complete... [READ] 74% complete...
[READ] 75% complete... [READ] 76% complete... [READ] 77% complete... [READ] 78%
complete... [READ] 79% complete... [READ] 80% complete... [READ] 81% complete...
[READ] 82% complete... [READ] 83% complete... [READ] 84% complete... [READ] 85%
complete... [READ] 86% complete... [READ] 87% complete... [READ] 88% complete...
[READ] 89% complete... [READ] 90% complete... [READ] 91% complete... [READ] 92%
complete... [READ] 93% complete... [READ] 94% complete... [READ] 95% complete...
[READ] 96% complete... [READ] 97% complete... [READ] 98% complete... [READ] 99%
complete... [READ] 100% complete... done.
Raw bitbang mode version 1
Bus Pirate shutdown completed.

dreg@rootkit.es# file flash_content.img
flash_content.img: Linux rev 1.0 ext2 filesystem data, UUID=d23af33b-a804-4a75-893a-
b6f469266dc7 (large files)
```

## Example FT232H W25Q64JV-.Q



```
flashrom.exe --progress -VV -c "W25Q64JV-.Q" -p ft2232_spi:type=232H -r  
flash_content.img
```

flashrom 1.4.0dev Built by Dreg rootkit.es --- on Windows 10.0 (x86\_64)  
flashrom is free software, get the source code at <https://flashrom.org>

```
Using clock_gettime for delay loops (clk_id: 1, resolution: 100ns).  
flashrom was built with GCC 13.1.0, little endian  
Command line (8 args): flashrom.exe --progress -VV -c W25Q64JV-.Q -p  
ft2232_spi:type=232H -r flash_content.img  
Initializing ft2232_spi programmer  
Using device type FTDI FT232H channel A.  
Disable divide-by-5 front stage  
Set clock divisor  
MPSSE clock: 60.000000 MHz, divisor: 2, SPI clock: 30.000000 MHz  
No loopback of TDI/DO TDO/DI  
Set data bits  
The following protocols are supported: SPI.  
Probing for Winbond W25Q64JV-.Q, 8192 kB: compare_id: id1 0xef, id2 0x4017  
Added layout entry 00000000 - 007ffffff named complete flash  
Found Winbond flash chip "W25Q64JV-.Q" (8192 kB, SPI) on ft2232_spi.  
Chip status register is 0x02.
```



This chip may contain one-time programmable memory. flashrom cannot read and may never be able to write it, hence it may not be able to completely clone the contents of this chip (see man page for details).

===

This flash part has status UNTESTED for operations: WP

The test status of this chip may have been updated in the latest development version of flashrom. If you are running the latest development version, please email a report to [flashrom@flashrom.org](mailto:flashrom@flashrom.org) if any of the above operations work correctly for you with this flash chip. Please include the flashrom log file for all operations you tested (see the man page for details), and mention which mainboard or programmer you tested in the subject line.

Thanks for your help!

write\_wp\_bits: wp\_verify reg:1 value:0x2

write\_wp\_bits: wp\_verify reg:2 value:0x0

write\_wp\_bits: wp\_verify reg:3 value:0xff

write\_wp\_bits: wp\_verify failed: reg:3 actual:0x4 expected:0x0

Failed to unlock flash status reg with wp support.

Block protection is disabled.

Reading flash... read\_flash: region (00000000..0x7ffffff) is readable, reading range (00000000..0x7ffffff).

[READ] 1% complete... [READ] 2% complete... [READ] 3% complete... [READ] 4% complete... [READ] 5% complete... [READ] 6% complete... [READ] 7% complete... [READ] 8% complete... [READ] 9% complete... [READ] 10% complete... [READ] 11% complete... [READ] 12% complete... [READ] 13% complete... [READ] 14% complete... [READ] 15% complete... [READ] 16% complete... [READ] 17% complete... [READ] 18% complete... [READ] 19% complete... [READ] 20% complete... [READ] 21% complete... [READ] 22% complete... [READ] 23% complete... [READ] 24% complete... [READ] 25% complete... [READ] 26% complete... [READ] 27% complete... [READ] 28% complete... [READ] 29% complete... [READ] 30% complete... [READ] 31% complete... [READ] 32% complete... [READ] 33% complete... [READ] 34% complete... [READ] 35% complete... [READ] 36% complete... [READ] 37% complete... [READ] 38% complete... [READ] 39% complete... [READ] 40% complete... [READ] 41% complete... [READ] 42% complete... [READ] 43% complete... [READ] 44% complete... [READ] 45% complete... [READ] 46% complete... [READ] 47% complete... [READ] 48% complete... [READ] 49% complete... [READ] 50% complete... [READ] 51% complete... [READ] 52% complete... [READ] 53% complete... [READ] 54% complete... [READ] 55% complete... [READ] 56% complete... [READ] 57% complete... [READ] 58% complete... [READ] 59% complete... [READ] 60% complete... [READ] 61% complete... [READ] 62% complete... [READ] 63% complete... [READ] 64% complete... [READ] 65% complete... [READ] 66% complete... [READ] 67% complete... [READ] 68% complete... [READ] 69% complete... [READ] 70% complete... [READ] 71% complete... [READ] 72% complete... [READ] 73% complete... [READ] 74% complete... [READ] 75% complete... [READ] 76% complete... [READ] 77% complete... [READ] 78% complete... [READ] 79% complete... [READ] 80% complete... [READ] 81% complete... [READ] 82% complete... [READ] 83% complete... [READ] 84% complete... [READ] 85% complete... [READ] 86% complete... [READ] 87% complete... [READ] 88% complete... [READ] 89% complete... [READ] 90% complete... [READ] 91% complete... [READ] 92% complete... [READ] 93% complete... [READ] 94% complete... [READ] 95% complete... [READ] 96% complete... [READ] 97% complete... [READ] 98% complete... [READ] 99% complete... [READ] 100% complete... done.

write\_wp\_bits: wp\_verify reg:1 value:0x2

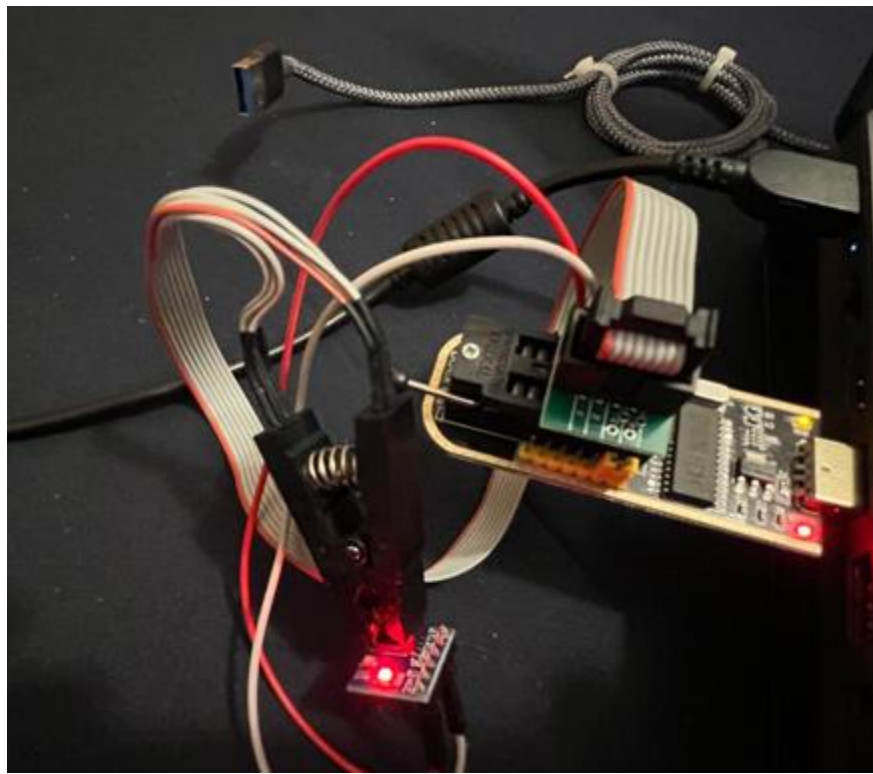
write\_wp\_bits: wp\_verify reg:2 value:0x0

write\_wp\_bits: wp\_verify reg:3 value:0xff

write\_wp\_bits: wp\_verify failed: reg:3 actual:0x4 expected:0x0

Releasing I/Os

## Example CH341A W25Q64JV-.Q (with clip)



```
flashrom.exe --progress -VV -c "W25Q64JV-.Q" -p ch341a_spi -r flash_content.img
```

flashrom 1.4.0dev Built by Dreg rootkit.es --- on Windows 10.0 (x86\_64)  
flashrom is free software, get the source code at <https://flashrom.org>

```
Using clock_gettime for delay loops (clk_id: 1, resolution: 100ns).
flashrom was built with GCC 13.1.0, little endian
Command line (8 args): flashrom.exe --progress -VV -c W25Q64JV-.Q -p ch341a_spi -r
flash_content.img
Initializing ch341a_spi programmer
Cannot detach the existing USB driver. Claiming the interface may fail.
LIBUSB_ERROR_NOT_SUPPORTED
Device revision is 3.0.4
The following protocols are supported: SPI.
Probing for Winbond W25Q64JV-.Q, 8192 kB: compare_id: id1 0xef, id2 0x4017
Added layout entry 00000000 - 007ffffff named complete flash
Found Winbond flash chip "W25Q64JV-.Q" (8192 kB, SPI) on ch341a_spi.
Chip status register is 0x00.
This chip may contain one-time programmable memory. flashrom cannot read
and may never be able to write it, hence it may not be able to completely
clone the contents of this chip (see man page for details).
===
This flash part has status UNTESTED for operations: WP
The test status of this chip may have been updated in the latest development
version of flashrom. If you are running the latest development version,
please email a report to flashrom@flashrom.org if any of the above operations
```



work correctly for you with this flash chip. Please include the flashrom log file for all operations you tested (see the man page for details), and mention which mainboard or programmer you tested in the subject line.

Thanks for your help!

write\_wp\_bits: wp\_verify reg:1 value:0x0

write\_wp\_bits: wp\_verify reg:2 value:0x0

write\_wp\_bits: wp\_verify reg:3 value:0x0

write\_wp\_bits: wp\_verify reg:1 value:0x0

write\_wp\_bits: wp\_verify reg:2 value:0x0

write\_wp\_bits: wp\_verify reg:3 value:0x0

Reading flash... read\_flash: region (00000000..0x7fffff) is readable, reading range (00000000..0x7fffff).

[READ] 1% complete... [READ] 2% complete... [READ] 3% complete... [READ] 4% complete... [READ] 5% complete... [READ] 6% complete... [READ] 7% complete... [READ] 8% complete... [READ] 9% complete... [READ] 10% complete... [READ] 11% complete... [READ] 12% complete... [READ] 13% complete... [READ] 14% complete... [READ] 15% complete... [READ] 16% complete... [READ] 17% complete... [READ] 18% complete... [READ] 19% complete... [READ] 20% complete... [READ] 21% complete... [READ] 22% complete... [READ] 23% complete... [READ] 24% complete... [READ] 25% complete... [READ] 26% complete... [READ] 27% complete... [READ] 28% complete... [READ] 29% complete... [READ] 30% complete... [READ] 31% complete... [READ] 32% complete... [READ] 33% complete... [READ] 34% complete... [READ] 35% complete... [READ] 36% complete... [READ] 37% complete... [READ] 38% complete... [READ] 39% complete... [READ] 40% complete... [READ] 41% complete... [READ] 42% complete... [READ] 43% complete... [READ] 44% complete... [READ] 45% complete... [READ] 46% complete... [READ] 47% complete... [READ] 48% complete... [READ] 49% complete... [READ] 50% complete... [READ] 51% complete... [READ] 52% complete... [READ] 53% complete... [READ] 54% complete... [READ] 55% complete... [READ] 56% complete... [READ] 57% complete... [READ] 58% complete... [READ] 59% complete... [READ] 60% complete... [READ] 61% complete... [READ] 62% complete... [READ] 63% complete... [READ] 64% complete... [READ] 65% complete... [READ] 66% complete... [READ] 67% complete... [READ] 68% complete... [READ] 69% complete... [READ] 70% complete... [READ] 71% complete... [READ] 72% complete... [READ] 73% complete... [READ] 74% complete... [READ] 75% complete... [READ] 76% complete... [READ] 77% complete... [READ] 78% complete... [READ] 79% complete... [READ] 80% complete... [READ] 81% complete... [READ] 82% complete... [READ] 83% complete... [READ] 84% complete... [READ] 85% complete... [READ] 86% complete... [READ] 87% complete... [READ] 88% complete... [READ] 89% complete... [READ] 90% complete... [READ] 91% complete... [READ] 92% complete... [READ] 93% complete... [READ] 94% complete... [READ] 95% complete... [READ] 96% complete... [READ] 97% complete... [READ] 98% complete... [READ] 99% complete... [READ] 100% complete... done.

write\_wp\_bits: wp\_verify reg:1 value:0x0

write\_wp\_bits: wp\_verify reg:2 value:0x0

write\_wp\_bits: wp\_verify reg:3 value:0x0

write\_wp\_bits: wp\_verify reg:1 value:0x0

write\_wp\_bits: wp\_verify reg:2 value:0x0

write\_wp\_bits: wp\_verify reg:3 value:0x0

## Supported programmers

Supported programmers:

dummy, raiden\_debug\_spi, ft2232\_spi, serprog, buspirate\_spi, dediprog, developerbox, pony\_spi, usbbaster\_spi, pickit2\_spi, ch341a\_spi, ch347\_spi,

digilent\_spi, stlinkv3\_spi, dirtyjtag\_spi

Supported devices for the dummy programmer:

Dummy device, does nothing and logs all accesses

Supported USB devices for the raiden\_debug\_spi programmer:

Vendor	Device	USB IDs	Status
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Supported USB devices for the ft2232\_spi programmer:

Vendor	Device	USB IDs	Status
FTDI	FT2232H	0403:6010	OK
FTDI	FT4232H	0403:6011	OK
FTDI	FT232H	0403:6014	OK
FTDI	FT4233H	0403:6041	OK
TIAO	USB Multi-Protocol Adapter	0403:8a98	OK
TIAO	USB Multi-Protocol Adapter Lite	0403:8a99	OK
Kristech	KT-LINK	0403:bbe2	OK
Amontec	JTAGkey	0403:cff8	OK
GOPEL	PicoTAP	096c:1449	OK
Google	Servo	18d1:5001	OK
Google	Servo V2 Legacy	18d1:5002	OK
Google	Servo V2	18d1:5003	OK
FIC	OpenMoko Neo1973 Debug board (V2+)	1457:5118	OK
Olimex	ARM-USB-OCD	15ba:0003	OK
Olimex	ARM-USB-TINY	15ba:0004	OK
Olimex	ARM-USB-OCD-H	15ba:002b	OK
Olimex	ARM-USB-TINY-H	15ba:002a	OK

Supported devices for the serprog programmer:

All programmer devices speaking the serprog protocol

Supported devices for the buspirate\_spi programmer:

Dangerous Prototypes Bus Pirate

Supported USB devices for the dediprog programmer:

Vendor	Device	USB IDs	Status
Dediprog	SF100/SF200/SF600	0483:dada	OK

Supported USB devices for the developerbox programmer:

Vendor	Device	USB IDs	Status
Silicon Labs	CP2102N USB to UART Bridge Controller	10c4:ea60	OK

Supported devices for the pony\_spi programmer:

Programmers compatible with SI-Prog, serbang or AJAWe

Supported USB devices for the usbbaster\_spi programmer:

Vendor	Device	USB IDs	Status
Altera	USB-Blaster	09fb:6001	OK

Supported USB devices for the pickit2\_spi programmer:

Vendor	Device	USB IDs	Status
Microchip	PICKit 2	04d8:0033	OK

Supported USB devices for the ch341a\_spi programmer:

Vendor	Device	USB IDs	Status
--------	--------	---------	--------

Winchiphead (WCH) CH341A 1a86:5512 OK

Supported USB devices for the ch347\_spi programmer:

Vendor	Device	USB IDs	Status
QinHeng Electronics	USB To UART+SPI+I2C	1a86:55db	OK

Supported USB devices for the digilent\_spi programmer:

Vendor	Device	USB IDs	Status
Digilent Development	board JTAG	1443:0007	OK

Supported USB devices for the stlinkv3\_spi programmer:

Vendor	Device	USB IDs	Status
STMicroelectronics	STLINK-V3E	0483:374e	Untested
STMicroelectronics	STLINK-V3S	0483:374f	OK
STMicroelectronics	STLINK-V3 dual VCP	0483:3753	OK
STMicroelectronics	STLINK-V3 no MSD	0483:3754	Untested

Supported USB devices for the dirtyjtag\_spi programmer:

Vendor	Device	USB IDs	Status
DirtyJTAG	JTAG probe	1209:c0ca	OK

## Supported ICs

Vendor	Device	Test	Known	Size
Type		OK	Broken	[kB]
(P = PROBE, R = READ, E = ERASE, W = WRITE, - = N/A)				
AMD	Am29F002(N)BB			256
Parallel				
AMD	Am29F002(N)BT			256
Parallel				
AMD	Am29F010			128
Parallel				
AMD	Am29F010A/B	PRE		128
Parallel				
AMD	Am29F016D			2048
Parallel				
AMD	Am29F040			512
Parallel				
AMD	Am29F040B			512
Parallel				
AMD	Am29F080			1024
Parallel				
AMD	Am29F080B			1024
Parallel				
AMD	Am29LV001BB	PREW		128
Parallel				
AMD	Am29LV001BT			128
Parallel				
AMD	Am29LV002BB			256
Parallel				

AMD	Am29LV002BT		256
Parallel			
AMD	Am29LV004BB		512
Parallel			
AMD	Am29LV004BT		512
Parallel			
AMD	Am29LV008BB	PREW	1024
Parallel			
AMD	Am29LV008BT		1024
Parallel			
AMD	Am29LV040B	PREW	512
Parallel			
AMD	Am29LV081B		1024
Parallel			
AMIC	A25L010		128
SPI			
AMIC	A25L016		2048
SPI			
AMIC	A25L020		256
SPI			
AMIC	A25L032	PREW	4096
SPI			
AMIC	A25L040		512
SPI			
AMIC	A25L05PT		64
SPI			
AMIC	A25L05PU		64
SPI			
AMIC	A25L080		1024
SPI			
AMIC	A25L10PT		128
SPI			
AMIC	A25L10PU		128
SPI			
AMIC	A25L16PT		2048
SPI			
AMIC	A25L16PU	PR	2048
SPI			
AMIC	A25L20PT		256
SPI			
AMIC	A25L20PU		256
SPI			
AMIC	A25L40PT	PR	512
SPI			
AMIC	A25L40PU	PREW	512
SPI			
AMIC	A25L512		64
SPI			
AMIC	A25L80P	PRE	1024
SPI			
AMIC	A25LQ032/		4096
SPI			
	A25LQ32A		
AMIC	A25LQ16		2048
SPI			

AMIC SPI	A25LQ64		8192
AMIC Parallel	A29002B		256
AMIC Parallel	A29002T	PREW	256
AMIC Parallel	A29040B	PREW	512
AMIC LPC	A49LF040A	PR	512
Atmel SPI	AT25DF011	PREW	128
Atmel SPI	AT25DF021		256
Atmel SPI	AT25DF021A	PREW	256
Atmel SPI	AT25DF041A	PREW	512
Atmel SPI	AT25DF081		1024
Atmel SPI	AT25DF081A		1024
Atmel SPI	AT25DF161	PREW	2048
Atmel SPI	AT25DF321	PREW	4096
Atmel SPI	AT25DF321A	PREW	4096
Atmel SPI	AT25DF641(A)	PREW	8192
Atmel SPI	AT25DL081		1024
Atmel SPI	AT25DL161		2048
Atmel SPI	AT25DQ161		2048
Atmel SPI	AT25F1024(A)	PREW	128
Atmel SPI	AT25F2048		256
Atmel SPI	AT25F4096	PREW	512
Atmel SPI	AT25F512	PREW	64
Atmel SPI	AT25F512A	PREW	64
Atmel SPI	AT25F512B		64
Atmel SPI	AT25FS010	PREW	128
Atmel SPI	AT25FS040		512
Atmel SPI	AT25SF041	PREW	512

Atmel SPI	AT25SF081	PREW	1024
Atmel SPI	AT25SF128A	PR	16384
Atmel SPI	AT25SF161	PREW	2048
Atmel SPI	AT25SF321	PR	4096
Atmel SPI	AT25SL128A	PREW	16384
Atmel SPI	AT26DF041	PREW	512
Atmel SPI	AT26DF081A	PREW	1024
Atmel SPI	AT26DF161	PREW	2048
Atmel SPI	AT26DF161A	PREW	2048
Atmel SPI	AT26F004		W 512
Atmel Parallel	AT29C010A	PREW	128
Atmel Parallel	AT29C020	PREW	256
Atmel Parallel	AT29C040A		512
Atmel Parallel	AT29C512	PREW	64
Atmel SPI	AT45CS1282		16896
Atmel SPI	AT45DB011D	PREW	128
Atmel SPI	AT45DB021D	PREW	256
Atmel SPI	AT45DB041D	PREW	512
Atmel SPI	AT45DB081D	PREW	1024
Atmel SPI	AT45DB161D	PREW	2048
Atmel SPI	AT45DB321C		4224
Atmel SPI	AT45DB321D	PREW	4096
Atmel SPI	AT45DB321E		4096
Atmel SPI	AT45DB642D	PREW	8192
Atmel Parallel	AT49(H)F010	PREW	128
Atmel Parallel	AT49BV512	PREW	64
Atmel Parallel	AT49F002(N)		256



Atmel Parallel	AT49F002(N)T	PR	256
Atmel Parallel	AT49F020	PRE	256
Atmel Parallel	AT49F040		512
Atmel Parallel	AT49F080		1024
Atmel Parallel	AT49F080T		1024
Atmel LPC, FWH	AT49LH002		256
Atmel LPC, FWH	AT49LH004		512
Atmel LPC, FWH	AT49LH00B4		512
Boya/ SPI	B.25D16A	PR	2048
BoHong Microelectronics Boya/ SPI	B.25D80A	PR	1024
BoHong Microelectronics Boya/ SPI	B.25Q128AS	PREW	16384
BoHong Microelectronics Bright Parallel	BM29F040	PR	512
Catalyst Parallel	CAT28F512	PR EW	64
ENE SPI	KB9012 (EDI)	PREW	128
ESI SPI	ES25P16		2048
ESI SPI	ES25P40		512
ESI SPI	ES25P80		1024
ESMT SPI	F25L008A	PREW	1024
ESMT SPI	F25L32PA		4096
ESMT Parallel	F49B002UA		256
Eon SPI	EN25B05		64
Eon SPI	EN25B05T		64
Eon SPI	EN25B10		128
Eon SPI	EN25B10T	PREW	128
Eon SPI	EN25B16		2048
Eon SPI	EN25B16T		2048

Eon	EN25B20		256
SPI			
Eon	EN25B20T		256
SPI			
Eon	EN25B32		4096
SPI			
Eon	EN25B32T		4096
SPI			
Eon	EN25B40		512
SPI			
Eon	EN25B40T		512
SPI			
Eon	EN25B64		8192
SPI			
Eon	EN25B64T		8192
SPI			
Eon	EN25B80		1024
SPI			
Eon	EN25B80T		1024
SPI			
Eon	EN25F05	PREW	64
SPI			
Eon	EN25F10	PREW	128
SPI			
Eon	EN25F16	PREW	2048
SPI			
Eon	EN25F20		256
SPI			
Eon	EN25F32	PREW	4096
SPI			
Eon	EN25F40	PREW	512
SPI			
Eon	EN25F64	PREW	8192
SPI			
Eon	EN25F80	PREW	1024
SPI			
Eon	EN25P05		64
SPI			
Eon	EN25P10		128
SPI			
Eon	EN25P16		2048
SPI			
Eon	EN25P20		256
SPI			
Eon	EN25P32		4096
SPI			
Eon	EN25P40		512
SPI			
Eon	EN25P64		8192
SPI			
Eon	EN25P80		1024
SPI			
Eon	EN25Q128	PREW	16384
SPI			

Eon	EN25Q16		2048
SPI			
Eon	EN25Q32(A/B)	PREW	4096
SPI			
Eon	EN25Q40		512
SPI			
Eon	EN25Q64	PREW	8192
SPI			
Eon	EN25Q80(A)		1024
SPI			
Eon	EN25QH128	PREW	16384
SPI			
Eon	EN25QH16	PREW	2048
SPI			
Eon	EN25QH32	PREW	4096
SPI			
Eon	EN25QH32B	PREW	4096
SPI			
Eon	EN25QH64	PREW	8192
SPI			
Eon	EN25QH64A	PREW	8192
SPI			
Eon	EN25S10		128
SPI			
Eon	EN25S16		2048
SPI			
Eon	EN25S20		256
SPI			
Eon	EN25S32		4096
SPI			
Eon	EN25S40	PREW	512
SPI			
Eon	EN25S64	PREW	8192
SPI			
Eon	EN25S80		1024
SPI			
Eon	EN29F002(A)(N)B	PREW	256
Parallel			
Eon	EN29F002(A)(N)T	PREW	256
Parallel			
Eon	EN29F010	PRE	128
Parallel			
Eon	EN29GL064(A)B		8192
Parallel			
Eon	EN29GL064(A)T		8192
Parallel			
Eon	EN29GL064H/L		8192
Parallel			
Eon	EN29GL128		16384
Parallel			
Eon	EN29LV040(A)	PREW	512
Parallel			
Eon	EN29LV640B	PREW	8192
Parallel			

Fudan SPI	FM25F005		64
Fudan SPI	FM25F01	PREW	128
Fudan SPI	FM25F02(A)		256
Fudan SPI	FM25F04(A)		512
Fudan SPI	FM25Q08		1024
Fudan SPI	FM25Q16		2048
Fudan SPI	FM25Q32		4096
Fujitsu Parallel	MBM29F004BC		512
Fujitsu Parallel	MBM29F004TC		512
Fujitsu Parallel	MBM29F400BC		512
Fujitsu Parallel	MBM29F400TC		512
Fujitsu Parallel	MBM29LV160BE		2048
Fujitsu Parallel	MBM29LV160TE		2048
GigaDevice SPI	GD25B128B/	PREW	16384
GigaDevice SPI	GD25Q128B GD25LQ128C/	PREW	16384
GigaDevice SPI	GD25LQ128D/ GD25LQ128E GD25LQ16		2048
GigaDevice SPI	GD25LQ32	PREW	4096
GigaDevice SPI	GD25LQ40		512
GigaDevice SPI	GD25LQ64(B)	PREW	8192
GigaDevice SPI	GD25LQ80		1024
GigaDevice SPI	GD25Q10		128
GigaDevice SPI	GD25Q127C/	PREW	16384
GigaDevice SPI	GD25Q128E GD25Q128C	PREW	16384
GigaDevice SPI	GD25Q16(B)	PREW	2048
GigaDevice SPI	GD25Q20(B)	PREW	256

GigaDevice SPI	GD25Q256D/	PREW	32768
GigaDevice SPI	GD25Q256E GD25Q32(B)	PREW	4096
GigaDevice SPI	GD25Q40(B)	PREW	512
GigaDevice SPI	GD25Q512	PREW	64
GigaDevice SPI	GD25Q64(B)	PREW	8192
GigaDevice SPI	GD25Q80(B)	PREW	1024
GigaDevice SPI	GD25T80		1024
GigaDevice SPI	GD25VQ16C		2048
GigaDevice SPI	GD25VQ21B		256
GigaDevice SPI	GD25VQ40C		512
GigaDevice SPI	GD25VQ41B	PREW	512
GigaDevice SPI	GD25VQ80C		1024
GigaDevice SPI	GD25WQ80E	PREW	1024
Hyundai Parallel	HY29F002B		256
Hyundai Parallel	HY29F002T	PRE	256
Hyundai Parallel	HY29F040A		512
ISSI SPI	IS25LP016	PREW	2048
ISSI SPI	IS25LP064	PREW	8192
ISSI SPI	IS25LP128	PREW	16384
ISSI SPI	IS25LP256	PREW	32768
ISSI SPI	IS25LQ016	PREW	2048
ISSI SPI	IS25WP016	PREW	2048
ISSI SPI	IS25WP020		256
ISSI SPI	IS25WP032		4096
ISSI SPI	IS25WP040		512
ISSI SPI	IS25WP064	PREW	8192
ISSI SPI	IS25WP080	PREW	1024

ISSI	IS25WP128	PREW	16384
SPI			
ISSI	IS25WP256	PREW	32768
SPI			
ISSI	IS25WQ040	PREW	512
SPI			
ISSI	IS29GL064B		8192
Parallel			
ISSI	IS29GL064H/L		8192
Parallel			
ISSI	IS29GL064T		8192
Parallel			
ISSI	IS29GL128H/L		16384
Parallel			
Intel	25F160S33B8		2048
SPI			
Intel	25F160S33T8		2048
SPI			
Intel	25F320S33B8		4096
SPI			
Intel	25F320S33T8		4096
SPI			
Intel	25F640S33B8	PREW	8192
SPI			
Intel	25F640S33T8		8192
SPI			
Intel	28F001BN/BX-B		128
Parallel			
Intel	28F001BN/BX-T	PREW	128
Parallel			
Intel	28F002BC/BL/BV/BX-T	PRE	256
Parallel			
Intel	28F004B5/BE/BV/BX-B		512
Parallel			
Intel	28F004B5/BE/BV/BX-T		512
Parallel			
Intel	28F008S3/S5/SC		512
Parallel			
Intel	28F400BV/BX/CE/CV-B		512
Parallel			
Intel	28F400BV/BX/CE/CV-T		512
Parallel			
Intel	AT82802AB	PREW	512
FWH			
Intel	82802AC	PR	1024
FWH			
Macronix	MX23L12854	--	16384
SPI			
Macronix	MX23L1654	--	2048
SPI			
Macronix	MX23L3254	PR--	4096
SPI			
Macronix	MX23L6454	PR--	8192
SPI			



Macronix SPI	MX25L1005(C)/	PREW	128
	MX25L1006E		
Macronix SPI	MX25L12805D	PREW	16384
Macronix SPI	MX25L12833F/	PREW	16384
	MX25L12835F/ MX25L12845E/ MX25L12865E/ MX25L12873F		
Macronix SPI	MX25L1605	PREW	2048
Macronix SPI	MX25V16066	PR	2048
Macronix SPI	MX25L1605A/	PREW	2048
	MX25L1606E/ MX25L1608E		
Macronix SPI	MX25L1605D/	PREW	2048
	MX25L1608D/ MX25L1673E		
Macronix SPI	MX25L1635D	PREW	2048
Macronix SPI	MX25L1635E		2048
Macronix SPI	MX25L2005(C)/	PREW	256
	MX25L2006E		
Macronix SPI	MX25L25635F/	PREW	32768
	MX25L25645G		
Macronix SPI	MX25L3205(A)	PREW	4096
Macronix SPI	MX25L3205D/	PREW	4096
	MX25L3208D		
Macronix SPI	MX25L3206E/	PREW	4096
	MX25L3208E		
Macronix SPI	MX25L3235D		4096
Macronix SPI	MX25L3233F/	PREW	4096
	MX25L3273E		
Macronix SPI	MX25L3255E	PREW	4096
Macronix SPI	MX25L4005(A/C)/	PREW	512
	MX25L4006E		
Macronix SPI	MX25L512(E)/	PREW	64
	MX25V512(C)		

Macronix SPI	MX25L5121E	PREW	64
Macronix SPI	MX25L6405	PREW	8192
Macronix SPI	MX25L6405D	PREW	8192
Macronix SPI	MX25L6406E/	PREW	8192
Macronix SPI	MX25L6408E MX25L6436E/	PREW	8192
Macronix SPI	MX25L6445E/ MX25L6465E MX25L6473E	PREW	8192
Macronix SPI	MX25L6473F	PREW	8192
Macronix SPI	MX25L6495F	PREW	8192
Macronix SPI	MX25L8005/	PREW	1024
Macronix SPI	MX25L8006E/ MX25L8008E/ MX25V8005 MX25R3235F	PREW	4096
Macronix SPI	MX25R6435F	PREW	8192
Macronix SPI	MX25V4035F		512
Macronix SPI	MX25V8035F		1024
Macronix SPI	MX25V1635F	PREW	2048
Macronix SPI	MX25U12835F	PREW	16384
Macronix SPI	MX25U1635E	PR	2048
Macronix SPI	MX25U25635F	PREW	32768
Macronix SPI	MX25U25643G	PREW	32768
Macronix SPI	MX25U3235E/F	PREW	4096
Macronix SPI	MX25U51245G	PREW	65536
Macronix SPI	MX25U6435E/F	PREW	8192
Macronix SPI	MX25U8032E	PREW	1024
Macronix Parallel	MX29F001B		128
Macronix Parallel	MX29F001T	PREW	128

Macronix Parallel	MX29F002(N)B		256
Macronix Parallel	MX29F002(N)T	PREW	256
Macronix Parallel	MX29F022(N)B		256
Macronix Parallel	MX29F022(N)T	PREW	256
Macronix Parallel	MX29F040		512
Macronix Parallel	MX29GL128F		16384
Macronix Parallel	MX29GL320EB		4096
Macronix Parallel	MX29GL320EH/L		4096
Macronix Parallel	MX29GL320ET		4096
Macronix Parallel	MX29GL640EB		8192
Macronix Parallel	MX29GL640EH/L		8192
Macronix Parallel	MX29GL640ET		8192
Macronix Parallel	MX29LV040		512
Macronix SPI	MX66L51235F/	PREW	65536
Macronix SPI	MX25L51245G		
Macronix SPI	MX66L1G45G	PREW	131072
Macronix SPI	MX77L25650F	PREW	32768
Micron/ SPI	M25P05		64
Numonyx/ST Micron/ SPI	M25P05-A	PREW	64
Numonyx/ST Micron/ SPI	M25P10		128
Numonyx/ST Micron/ SPI	M25P10-A	PREW	128
Numonyx/ST Micron/ SPI	M25P128	PREW	16384
Numonyx/ST Micron/ SPI	M25P16	PREW	2048
Numonyx/ST Micron/ SPI	M25P20		256
Numonyx/ST			

Micron/ SPI Numonyx/ST	M25P20-old	PREW	256
Micron/ SPI Numonyx/ST	M25P32	PREW	4096
Micron/ SPI Numonyx/ST	M25P40	PREW	512
Micron/ SPI Numonyx/ST	M25P40-old		512
Micron/ SPI Numonyx/ST	M25P64	PREW	8192
Micron/ SPI Numonyx/ST	M25P80	PREW	1024
Micron/ SPI Numonyx/ST	M25PE10		128
Micron/ SPI Numonyx/ST	M25PE16		2048
Micron/ SPI Numonyx/ST	M25PE20		256
Micron/ SPI Numonyx/ST	M25PE40	PREW	512
Micron/ SPI Numonyx/ST	M25PE80	PREW	1024
Micron/ SPI Numonyx/ST	M25PX16	PREW	2048
Micron/ SPI Numonyx/ST	M25PX32	PRE	4096
Micron/ SPI Numonyx/ST	M25PX64	PREW	8192
Micron/ SPI Numonyx/ST	M25PX80	PREW	1024
Micron/ SPI Numonyx/ST	M45PE10		128
Micron/ SPI Numonyx/ST	M45PE16		2048
Micron/ SPI Numonyx/ST	M45PE20		256
Numonyx/ST			

Micron/ SPI	M45PE40		512
Numonyx/ST Micron/ SPI	M45PE80		1024
Numonyx/ST Micron/ SPI	N25Q00A..1G		131072
Numonyx/ST Micron/ SPI	N25Q00A..3G		131072
Numonyx/ST Micron/ SPI	N25Q016		2048
Numonyx/ST Micron/ SPI	N25Q032..1E		4096
Numonyx/ST Micron/ SPI	N25Q032..3E	PREW	4096
Numonyx/ST Micron/ SPI	N25Q064..1E	PREW	8192
Numonyx/ST Micron/ SPI	N25Q064..3E	PREW	8192
Numonyx/ST Micron/ SPI	N25Q128..1E	PREW	16384
Numonyx/ST Micron/ SPI	N25Q128..3E	PREW	16384
Numonyx/ST Micron/ SPI	N25Q256..1E		32768
Numonyx/ST Micron/ SPI	N25Q256..3E		32768
Numonyx/ST Micron/ SPI	N25Q512..1G		65536
Numonyx/ST Micron/ SPI	N25Q512..3G	PREW	65536
Numonyx/ST Micron SPI	MT25QL01G	PREW	131072
Micron SPI	MT25QU01G		131072
Micron SPI	MT25QL02G		262144
Micron SPI	MT25QU02G		262144
Micron SPI	MT25QU128		16384

Micron SPI	MT25QL128	PREW	16384
Micron SPI	MT25QL256	PREW	32768
Micron SPI	MT25QU256	PREW	32768
Micron SPI	MT25QL512	PREW	65536
Micron SPI	MT25QU512	PREW	65536
MoselVitellic Parallel	V29C51000B		64
MoselVitellic Parallel	V29C51000T		64
MoselVitellic Parallel	V29C51400B		512
MoselVitellic Parallel	V29C51400T		512
MoselVitellic Parallel	V29LC51000		64
MoselVitellic Parallel	V29LC51001		128
MoselVitellic Parallel	V29LC51002		256
Nantronics SPI	N25S10		128
Nantronics SPI	N25S16		2048
Nantronics SPI	N25S20		256
Nantronics SPI	N25S40		512
Nantronics SPI	N25S80		1024
PMC SPI	Pm25LD010(C)	PREW	128
PMC SPI	Pm25LD020(C)	PREW	256
PMC SPI	Pm25LD040(C)	PREW	512
PMC SPI	Pm25LD256C		32
PMC SPI	Pm25LD512(C)	PREW	64
PMC SPI	Pm25LQ016		2048
PMC SPI	Pm25LQ020		256
PMC SPI	Pm25LQ032C	PREW	4096
PMC SPI	Pm25LQ040		512
PMC SPI	Pm25LQ080		1024



PMC	Pm25LV010	PREW	128
SPI			
PMC	Pm25LV010A	PREW	128
SPI			
PMC	Pm25LV016B		2048
SPI			
PMC	Pm25LV020		256
SPI			
PMC	Pm25LV040	PREW	512
SPI			
PMC	Pm25LV080B		1024
SPI			
PMC	Pm25LV512(A)	PREW	64
SPI			
PMC	Pm29F002B		256
Parallel			
PMC	Pm29F002T	PREW	256
Parallel			
PMC	Pm39LV010	PREW	128
Parallel			
PMC	Pm39LV020		256
Parallel			
PMC	Pm39LV040	PR	512
Parallel			
PMC	Pm39LV512	PREW	64
Parallel			
PMC	Pm49FL002	PR	256
LPC, FWH			
PMC	Pm49FL004	PREW	512
LPC, FWH			
PUYA	P25Q06H		64
SPI			
PUYA	P25Q11H		128
SPI			
PUYA	P25Q21H	PREW	256
SPI			
SST	SST25LF020A	PREW	256
SPI			
SST	SST25LF040A	PREW	512
SPI			
SST	SST25LF080(A)		1024
SPI			
SST	SST25VF010(A)	PREW	128
SPI			
SST	SST25VF016B	PREW	2048
SPI			
SST	SST25VF020		256
SPI			
SST	SST25VF020B	PREW	256
SPI			
SST	SST25VF032B	PREW	4096
SPI			
SST	SST25VF040	PR	512
SPI			

SST	SST25VF040B	PREW	512
SPI			
SST	SST25VF040B.REMS	PREW	512
SPI			
SST	SST25VF064C	PREW	8192
SPI			
SST	SST25VF080B	PREW	1024
SPI			
SST	SST25VF512(A)	PREW	64
SPI			
SST	SST25WF010		128
SPI			
SST	SST25WF020		256
SPI			
SST	SST25WF020A		256
SPI			
SST	SST25WF040		512
SPI			
SST	SST25WF040B		512
SPI			
SST	SST25WF080	PREW	1024
SPI			
SST	SST25WF080B	PREW	1024
SPI			
SST	SST25WF512		64
SPI			
SST	SST26VF016B(A)	PREW	2048
SPI			
SST	SST26VF032B(A)		4096
SPI			
SST	SST26VF064B(A)	PREW	8192
SPI			
SST	SST28SF040A		512
Parallel			
SST	SST29EE010	PR	128
Parallel			
SST	SST29EE020A	PRE	256
Parallel			
SST	SST29LE010		128
Parallel			
SST	SST29LE020	PRE	256
Parallel			
SST	SST39SF010A	PREW	128
Parallel			
SST	SST39SF020A	PREW	256
Parallel			
SST	SST39SF040	PREW	512
Parallel			
SST	SST39SF512	PREW	64
Parallel			
SST	SST39VF010	PREW	128
Parallel			
SST	SST39VF020	PREW	256
Parallel			

SST	SST39VF040	PREW	512
Parallel			
SST	SST39VF080		1024
Parallel			
SST	SST39VF512	PREW	64
Parallel			
SST	SST49LF002A/B	PREW	256
FWH			
SST	SST49LF003A/B	PREW	384
FWH			
SST	SST49LF004A/B	PREW	512
FWH			
SST	SST49LF004C		512
FWH			
SST	SST49LF008A	PREW	1024
FWH			
SST	SST49LF008C		1024
FWH			
SST	SST49LF016C	PREW	2048
FWH			
SST	SST49LF020	PREW	256
LPC			
SST	SST49LF020A	PRE	256
LPC			
SST	SST49LF040	PREW	512
LPC			
SST	SST49LF040B	PREW	512
LPC			
SST	SST49LF080A	PREW	1024
LPC			
SST	SST49LF160C	PR	2048
LPC			
ST	M29F002B		256
Parallel			
ST	M29F002T/NT	PREW	256
Parallel			
ST	M29F040B		512
Parallel			
ST	M29F400BB		512
Parallel			
ST	M29F400BT		512
Parallel			
ST	M29W010B		128
Parallel			
ST	M29W040B		512
Parallel			
ST	M29W512B	PREW	64
Parallel			
ST	M50FLW040A		512
LPC, FWH			
ST	M50FLW040B		512
LPC, FWH			
ST	M50FLW080A	PR	1024
LPC, FWH			

ST	M50FLW080B		1024
LPC, FWH			
ST	M50FW002	PR	256
FWH			
ST	M50FW016		2048
FWH			
ST	M50FW040	PR	512
FWH			
ST	M50FW080	PR	1024
FWH			
ST	M50LPW080		1024
LPC			
ST	M50LPW116		2048
LPC			
ST	M95M02	PREW	256
SPI			
Sanyo	LE25FU106B		128
SPI			
Sanyo	LE25FU206		256
SPI			
Sanyo	LE25FU206A		256
SPI			
Sanyo	LE25FU406B	PREW	512
SPI			
Sanyo	LE25FU406C/	PREW	512
SPI			
	LE25U40CMC		
Sanyo	LE25FW106	PREW	128
SPI			
Sanyo	LE25FW203A		256
SPI			
Sanyo	LE25FW403A		512
SPI			
Sanyo	LE25FW406A	PREW	512
SPI			
Sanyo	LE25FW418A		512
SPI			
Sanyo	LE25FW806		1024
SPI			
Sanyo	LE25FW808		1024
SPI			
Sharp	LH28F008BJT-BTLZ1	PREW	1024
Parallel			
Sharp	LHF00L04		1024
FWH			
Spansion	S25FL004A		512
SPI			
Spansion	S25FL008A	PRE	1024
SPI			
Spansion	S25FL016A	PREW	2048
SPI			
Spansion	S25FL032A/P	PREW	4096
SPI			
Spansion	S25FL064A/P	PREW	8192
SPI			

Spansion SPI	S25FL116K/		2048
Spansion SPI	S25FL216K S25FL127S-256kB		16384
Spansion SPI	S25FL127S-64kB	PREW	16384
Spansion SPI	S25FL128L	PREW	16384
Spansion SPI	S25FL128P.....0	PREW	16384
Spansion SPI	S25FL128P.....1		16384
Spansion SPI	S25FL128S.....0	PREW	16384
Spansion SPI	S25FL128S.....1		16384
Spansion SPI	S25FL128S_UL Uniform 128 kB Sectors		16384
Spansion SPI	S25FL128S_US Uniform 64 kB Sectors		16384
Spansion SPI	S25FL129P.....0	PREW	16384
Spansion SPI	S25FL129P.....1		16384
Spansion SPI	S25FL132K		4096
Spansion SPI	S25FL164K	PREW	8192
Spansion SPI	S25FL204K	PR	512
Spansion SPI	S25FL208K	PREW	1024
Spansion SPI	S25FL256L		32768
Spansion SPI	S25FL256S Large Sectors		16384
Spansion SPI	S25FL256S Small Sectors	PREW	16384
Spansion SPI	S25FL256S.....0	PREW	32768
Spansion SPI	S25FL512S		65536
Spansion SPI	S25FS128S Large Sectors		16384
Spansion SPI	S25FS128S Small Sectors	PREW	16384
SyncMOS/ Parallel MoselVitellic	{F,S,V}29C51001B		128
SyncMOS/ Parallel MoselVitellic	{F,S,V}29C51001T		128
SyncMOS/ Parallel	{F,S,V}29C51002B		256

MoselVitellic SyncMOS/ Parallel	{F,S,V}29C51002T	PREW	256
MoselVitellic SyncMOS/ Parallel	{F,S,V}29C51004B		512
MoselVitellic SyncMOS/ Parallel	{F,S,V}29C51004T		512
MoselVitellic SyncMOS/ Parallel	{S,V}29C31004B		512
MoselVitellic SyncMOS/ Parallel	{S,V}29C31004T		512
MoselVitellic TI Parallel	TMS29F002RB		256
TI Parallel	TMS29F002RT		256
Winbond SPI	W25P16		2048
Winbond SPI	W25P32		4096
Winbond SPI	W25P80		1024
Winbond SPI	W25Q128.V	PREW	16384
Winbond SPI	W25Q128.V..M	PREW	16384
Winbond SPI	W25Q128.W	PREW	16384
Winbond SPI	W25Q128.JW.DTR	PREW	16384
Winbond SPI	W25Q16.V	PREW	2048
Winbond SPI	W25Q16.W		2048
Winbond SPI	W25Q20.W		256
Winbond SPI	W25Q256FV	PREW	32768
Winbond SPI	W25Q256JV_Q		32768
Winbond SPI	W25Q256JV_M	PREW	32768
Winbond SPI	W25Q256JW	PREW	32768
Winbond SPI	W25Q256JW_DTR	PREW	32768
Winbond SPI	W25Q32BV/ W25Q32CV/ W25Q32DV	PREW	4096



Winbond SPI	W25Q32FV	PREW	4096
Winbond SPI	W25Q32JV	PREW	4096
Winbond SPI	W25Q32BW/	PREW	4096
	W25Q32CW/ W25Q32DW W25Q32FW	PREW	4096
Winbond SPI			
Winbond SPI	W25Q32JW...Q	PREW	4096
Winbond SPI	W25Q32JW...M	PREW	4096
Winbond SPI	W25Q40.V	PREW	512
Winbond SPI	W25Q40BW	PREW	512
Winbond SPI	W25Q40EW	PREW	512
Winbond SPI	W25Q512JV	PREW	65536
Winbond SPI	W25Q512NW-IM	PREW	65536
Winbond SPI	W25Q64BV/	PREW	8192
	W25Q64CV/ W25Q64FV W25Q64JV-.Q	PREW	8192
Winbond SPI			
Winbond SPI	W25Q64JV-.M	PREW	8192
Winbond SPI	W25Q64.W	PREW	8192
Winbond SPI	W25Q64JW...M	PREW	8192
Winbond SPI	W25Q80.V	PREW	1024
Winbond SPI	W25Q80BW	PREW	1024
Winbond SPI	W25Q80EW	PREW	1024
Winbond SPI	W25X05	PREW	64
Winbond SPI	W25X10	PREW	128
Winbond SPI	W25X16	PREW	2048
Winbond SPI	W25X20	PREW	256
Winbond SPI	W25X32	PREW	4096
Winbond SPI	W25X40	PREW	512

Winbond SPI	W25X64	PREW	8192
Winbond SPI	W25X80	PREW	1024
Winbond Parallel	W29C010(M)/	PREW	128
Winbond Parallel	W29C011A/ W29EE011/ W29EE012 W29C010(M)/	PREW	128
Winbond Parallel	W29C011A/ W29EE011/ W29EE012-old W29C020(C)/	PREW	256
Winbond Parallel	W29C022 W29C040/P		512
Winbond Parallel	W29C512A/	PREW	64
Winbond Parallel	W29EE512 W29GL032CB		4096
Winbond Parallel	W29GL032CH/L		4096
Winbond Parallel	W29GL032CT		4096
Winbond Parallel	W29GL064CB		8192
Winbond Parallel	W29GL064CH/L		8192
Winbond Parallel	W29GL064CT		8192
Winbond Parallel	W29GL128C		16384
Winbond Parallel	W39F010	PREW	128
Winbond Parallel	W39L010		128
Winbond Parallel	W39L020		256
Winbond Parallel	W39L040	PR	512
Winbond LPC	W39V040A	PREW	512
Winbond LPC	W39V040B	PREW	512
Winbond LPC	W39V040C	PREW	512
Winbond FWH	W39V040FA	PREW	512
Winbond FWH	W39V040FB	PREW	512

Winbond FWH	W39V040FC	PREW	512
Winbond LPC	W39V080A	PREW	1024
Winbond FWH	W39V080FA	PREW	1024
Winbond FWH	W39V080FA (dual mode)		512
Winbond Parallel	W49F002U/N	PREW	256
Winbond Parallel	W49F020	P	256
Winbond LPC	W49V002A	PREW	256
Winbond FWH	W49V002FA	PREW	256
XMC SPI	XM25QH80B	PREW	1024
XMC SPI	XM25QH64C	PREW	8192
XMC SPI	XM25QU64C		8192
XMC SPI	XM25QH128A	PREW	16384
XMC SPI	XM25QH128C		16384
XMC SPI	XM25QU128C		16384
XMC SPI	XM25QH256C	PR	32768
XMC SPI	XM25QU256C		32768
XTX Technology Limited SPI	XT25F02E	PREW	256
XTX Technology Limited SPI	XT25F64B	PREW	8192
Zetta Device SPI	ZD25D20		256
Zetta Device SPI	ZD25D40		512

## Related

- <https://github.com/therealdreg/flashrom-dregmod>
- <https://github.com/therealdreg/asprogrammer-dregmod>
- <https://github.com/therealdreg/buzzpirat>