

## Flash 2 click



PID: MIKROE-2267

RS Product Code: [136-0815](#)

Flash 2 click is a mikroBUS™ add-on board for adding more Flash Memory to your target board microcontroller. It carries Microchip's SST26VF064B flash-memory module with 64 Mbits capacity. It's a highly reliable module with a specified minimum of 100,000 read and write cycles and with over 100 years of Data Retention. For data security, the module features a One-Time Programmable (OTP) 2 KB bit secure ID and a 64 bit unique, factory pre-programmed identifier. Additional software security measures include individual-block write Protection with permanent lock-down capability. Flash 2 click communicates with the target MCU through the mikroBUS™ SPI interface (CS#, SCK, MISO, MOSI) with additional functionality provided by the #HOLD pin (in place of default mikroBUS™ RST pin). The board is designed to use a 3.3V power supply.

Product Type	Flash
Applications	Ideal as a mass storage option in multimedia devices, drives, optical and printing devices.
On-board modules	Microchip's SST26VF064B flash-memory module with 64 Mbits capacity
Key Features	100,000 write cycles with 100 years of data retention.
Key Benefits	One-Time programmable 2 KB secure ID. 64 bit, factory pre-programmed identifier.
Interface	SPI
Power Supply	3.3V
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Weight	20g

## Features and usage notes

The SST26VF064B/064BA memory array is organized in uniform, 4 KByte erasable sectors with the following erasable blocks:

- Eight 8 KB parameter
- Two 32 KByte overlay
- One-hundred twenty-six 64 KByte overlay blocks

The #HOLD pin temporarily stops serial communication with the SPI Flash memory while the device is selected. This pin only works in SPI, single-bit and dual-bit Read mode and must be tied high when not in use.

The manufacturer's data sheet has more information about the memory protection features of the chip:

"SST26VF064B/064BA offers flexible memory protection scheme that allows the protection state of each individual block to be controlled separately. In addition, the Write-Protection Lock-Down register prevents any change of the lock status during device operation. To avoid inadvertent writes during power-up, the device is write-protected by default after a power-on reset cycle. A Global Block Protection Unlock command offers a single command cycle that unlocks the entire memory array for faster manufacturing throughput."

## Programming

This link [Mikroe.com](http://Mikroe.com) will show a snippet that initializes all necessary pins and functions for using Flash 2 Click, and performs a test by writing test values to the click, and then reading them back to the user through UART communication.

Code examples that demonstrate the usage of Flash 2 click with MikroElektronika hardware, written for mikroC for ARM, AVR, dsPIC, FT90x, PIC and PIC32 are available on Libstock

## Downloads

[Flash 2 click Examples](#)

[Flash 2 click Learn Tutorial](#)

[Flash 2 click Schematic](#)