

## Test & Debug Hardware

The following test and debug hardware can be used to test, demonstrate and get familiar with our emFile software. Complete schematics are included.

### NAND Flash Eval Board

The SEGGER "NAND-Flash EVAL" board is an easy to use and cost effective testing tool designed to evaluate the features and the performance of the emFile NAND driver.

There are two ways to access the data in the NAND flash memory. It can be accessed via file system using emFile.

Alternatively the data can be accessed as a USB mass storage device like a USB-Stick using emUSB-Device with MSD class and emFile storage layer.

Common evaluation boards are usually used to perform these tests but this approach brings several disadvantages. Software and hardware development tools are required to build and load the application into the target system. Moreover, the tests are restricted to the type of NAND flash which is soldered on the board.

The "NAND-Flash EVAL" board was designed to overcome these limitations and provides the user with an affordable alternative. The main feature is that the NAND flash is not directly soldered on the board. A 48-pin TSOP socket is used instead which allows the user to experiment with different types of NAND flashes. This helps finding the right NAND flash for an application and thus reducing costs. A further important feature is that the "NAND-Flash EVAL" board comes preloaded with a USB-MSD application. When connected to a PC over USB, the board shows up as a removable storage on the host operating system. Performance and functionality tests of NAND flash can be performed in this way without the need of an expensive development environment. All current operating systems will recognize the board out of the box.

### Trial software packages

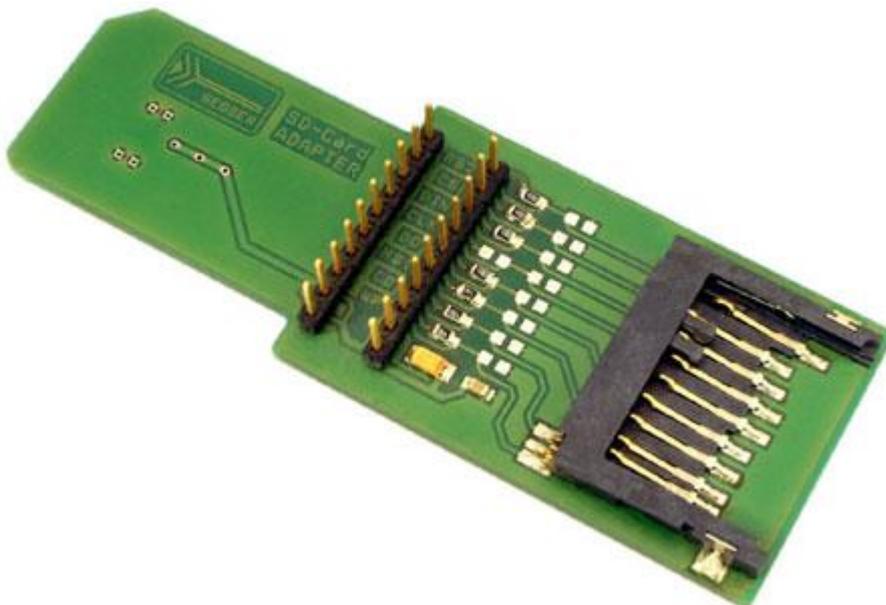
The "NAND-Flash EVAL" board comes with a ready to use USB-MSD application in binary form. emFile is provided in object code form together with a start project which can be easily modified to create custom applications. For programming and debugging a JTAG debug probe like J-Link is required.

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### SD Card Adapter

On some evaluation boards the pins required for measuring are not accessible, so that an oscilloscope or logic analyzer cannot capture the outputs.

An adapter which can be inserted between the card slot and the card, is the best solution in those situations.



#### Features

- Card Detect signal
- Write Protect signal
- SPI and Card Mode
- GND and signal headers