

## PRESS RELEASE

## X-86m2 and F-86: New SATA III portfolio with 3D-NAND from Swissbit.

**Highest reliability for industrial applications in M.2 2242 and CFast™ formats.**

Bronschhofen, Switzerland. March 4, 2021 – Durable, reliable and attractively priced: Swissbit is strengthening its range of industrial-grade storage media with two new product ranges featuring SATA III interfaces. The X-86m2 series in the ultra-compact M.2 2242 form factor and the CFast™ card F-86 show off their full performance capabilities, especially as robust boot and application drives, and set themselves apart with a perfectly coordinated feature set. The key highlights are a high-quality 3D-NAND in pSLC mode, a SATA NAND flash controller specially developed for industrial requirements without additional DRAM, and fully optimized proprietary firmware. This makes both series the optimal storage solution for embedded systems and industrial applications, as well as for network devices where durability, system reliability and safety from power failure are imperative.

Whether as a removable medium in the proven CFast™ form factor (F-86) or as an M.2 SATA SSD module (X-86m2), the newly introduced series are notable for their low power consumption and reduced heat output. This ensures stable, high-performance, and consistent read and write operation, even in critical applications. Both series are based on high-quality flash memory chips with 3D TLC NAND technology, configured in pSLC mode.

The application areas where the new series will deliver benefits are diverse, ranging from embedded systems, HMI devices and PLCs for industrial automation & control technology to POS/POI terminals, industrial PCs and medical technology to network components such as routers, switches or gateways.

“During development, we focused on reliable long-term use under industrial conditions,” explains Roger Griesemer, General Manager Memory Solutions at Swissbit AG. “Through the combination of 3D-NAND in pSLC mode and a DRAM-free product architecture featuring a controller specially designed for industry with integrated SRAM bit error correction, we offer a cost-efficient solution with the X-86m2 and F-86 series that meets the highest demands.”

### **Enhanced firmware functions for data security and long service life**

X-86m2 and F-86 are each available with storage capacities from 10 GB to 160 GB (8 GB is also available on request). The interface conforms to the SATA III standard with 6 Gb/s and is backwards compatible with SATA II and SATA I. The

sequential data rates are up to 375 MB/s for reading and 236 MB/s for writing. Those sequential data rates are also available with SATA II. Both series are specified for industrial use at operating temperatures from -40 °C to +85 °C but will also be available in versions for the 0 °C to +70 °C temperature range.

The optimized firmware supports active as well as passive data care management and ensures data retention even in the event of a power failure. In addition, thanks to the availability of detailed lifetime information, service intervals can be determined and pre-planned – a feature that significantly reduces the total cost of ownership due to the higher write load capacity compared to similar solutions. The functional scope of X-86m2 and F-86 is rounded off with background media refresh, end-to-end data path protection, SRAM ECC and subpage-based Flash Translation Layer (FTL) as well as optional security functions such as AES-128/256 encryption.

In the coming months, Swissbit plans to expand its portfolio with the X-80m2 and F-80 configured with higher memory capacities in 3D TLC mode.

### Available images

The following images are available for download in printable format at:

<http://www.htcm.de/kk/swissbit>

 <p>Image Source: Swissbit</p> <p><b>Highly reliable and durable: the X-86m2 series in the ultra-compact M.2 2242 form factor</b></p>	 <p>Image Source: Swissbi</p> <p><b>Designed for the toughest industrial demands: the CFast™ card series F-86</b></p>
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### About Swissbit

Swissbit AG is the only independent European manufacturer of storage and embedded IoT solutions for demanding applications. Swissbit combines its unique competences in storage and embedded IoT technology with its advanced packaging knowhow. This expertise allows Swissbit customers to reliably store and protect data in critical industrial, NetCom, automotive, medical and finance applications as well as across the Internet of Things (IoT).

Swissbit develops and manufactures industrial-grade storage and security products “Made in Germany” with high reliability, long-term availability, and custom optimization.

Swissbit's storage range includes SSDs with PCIe and SATA interface such as mSATA, Slim SATA, CFast™, M.2 and 2.5" as well as CompactFlash, USB flash drives, SD Memory Cards, micro SD Memory Cards and managed NAND BGAs like e.MMC. Security products are available in various application specific editions as USB flash drives, SD Memory Cards, and micro SD Memory Cards.

Swissbit was founded in 2001 and has offices in Switzerland, Germany, USA, Japan and Taiwan. Swissbit owns the registered trademarks Swissbit® and Hyperstone®. Since 2020, the independent investment firm Ardian is holding a majority stake in the company to support its growth.

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