



The Embedded Experts



# Production Tools

# Flasher PRO



The “almost-anything” flash programmer for microcontrollers, SoCs and (Q)SPI flashes

## High-speed programming

Flash programmers are designed to achieve top programming speeds, coming very close to the theoretical minimum programming time of the target hardware.

## Flexible control and monitoring

The Flasher PRO is easy to set up and operate using SEGGER software tools. It can be used in either stand-alone or PC-based programming mode.

## Serial number assignment

Many modern devices require some pieces of unique information. Flasher PRO allows the programming of data that differs amongst other otherwise identical units.

## Built-in web server

The Flasher PRO offers options to check status information and to configure devices remotely.

## Updates free of charge

Future software and firmware updates, as well as any new flash loaders for target devices that will be added, are free of charge.

## Authorized Flashing

The Flasher PRO can limit the number of flash programming cycles, thereby limiting the number of devices to which the firmware can be transferred. This protects the IP against unauthorized access.

## Key features

- High speed
- Large number of devices supported
- Flexible programming interface: Almost anything can be programmed.
- Multi-platform: Includes setup and control software for Linux, macOS and Windows.
- One time cost – no additional license fees



## USE CASES

- ➔ Maximum line speed for lean manufacturing: <https://casestudies.segger.com/seggers-flasher-pro-increases-production-reliability-for-viessmann/>
- ➔ Various hardware platforms ...



# Flasher PRO XL



The universal flash programmer for huge images

## Extra-large memory

The Flasher PRO XL can, even in stand-alone mode, program devices with up to 2 GB of memory and it comes with the option of memory expansion.

## High-speed programming

Flash programmers are designed to achieve top programming speeds, coming very close to the theoretical minimum programming time of the target hardware.

## Flexible control and monitoring

The Flasher PRO XL is easy to set up and operate using SEGGER software tools. It can be used in either stand-alone or PC-based programming mode.

## Serial number assignment

Many modern devices require some pieces of unique information. The Flasher PRO XL allows programming of data that differs amongst other otherwise identical units.

## Built-in web server

The Flasher PRO offers options to check status information and to configure devices remotely.

## Authorized Flashing

The Flasher PRO XL can limit the number of flash programming cycles, thereby limiting the number of devices to which the firmware can be transferred. This protects the IP against unauthorized access.

## Key features

- 2 Gigabytes of memory plus memory expandability
- Large number of devices supported
- Flexible programming interface
- Multiple status and control options
- Multi-platform:  
Includes setup and control software for Linux, macOS and Windows.
- One time cost – no additional license fees

## USE CASES

- ➔ Programming rich user interfaces integrated into complex systems
- ➔ Hosting multiple firmware images & configurations for mass customization
- ➔ MPUs running a rich OS like Linux or Android



## Updates are free of charge

Future software and firmware updates, as well as any new flash loaders for target devices that will be added, are free of charge.



# Flasher Compact/Hub



High-volume gang programming at maximum speed

## Parallel programming

The Flasher Hub controls multiple Flasher Compacts. Each Flasher can be configured individually to program different targets with different firmware.

## High-speed programming

Flash programmers are designed to achieve top programming speeds, coming very close to the theoretical minimum programming time of the target hardware.

## Flexible control and monitoring

The Flasher Hub is easy to set up and operate using SEGGER software tools. It can be used stand-alone mode.

## Compact housing

The Flasher Compact is a powerful flexible universal programming tool in a slim and light housing for easy integration into production rigs or automated test equipment (ATE).

## Built-in web server

The Flasher Hub offers options to check status information and to configure each device individually remotely.

## Updates free of charge

Future software and firmware updates, as well as any new flash loaders for target devices that will be added, are free of charge.

## Key features

- Scalability: Up to 24 individual parallel programming channels with their own circuit memory
- Built-in web & FTP server for easy setup
- Easy integration into production rigs or ATE
- Multi-platform: Includes setup and control software for Linux, macOS and Windows.
- One time cost – no additional license fees



## USE CASES

- ➔ Flashing & coding in high-volume mass production
- ➔ Programming in size-limited production setups
- ➔ MPUs running a rich OS like Linux or Android
- ➔ In-system programming for complex manufacturing lines

## Serial number assignment

Many modern devices require some pieces of unique information. The Flasher Compact allows programming of data that differs amongst other otherwise identical units.

[www.segger.com/flasher-hub](http://www.segger.com/flasher-hub)

[www.segger.com/flasher-compact](http://www.segger.com/flasher-compact)



# Flasher Portable PLUS



The battery-powered handheld service programmer

## High-speed programming

Flash programmers are designed to achieve top programming speeds, coming very close to the theoretical minimum programming time of the target hardware.

## Customizability

The Flasher Portable PLUS is highly customizable, including options like customized splash screen content or fascia branding with company colors, corporate logos and slogans.

## Power efficiency

The Flasher Portable PLUS is powered by a rechargeable internal lithium ion battery with more than 10 hours of continuous, untethered, stand-alone operation.

## User interface

The Flasher Portable PLUS has a robust user interface with a built-in 1.8-inch LCD that displays important information about the firmware or the programming process.

## Authorized Flashing

The Flasher Portable PLUS can limit the number of flash programming cycles, thereby limiting the number of devices to which the firmware can be transferred. This protects the IP against unauthorized access.

## Updates free of charge

Future software and firmware updates, as well as any new flash loaders for target devices that will be added, are free of charge.

## Key features

- Option for customer-chosen colors, corporate logos and slogans, customized splash screen and other corporate design elements
- Full insights with the LCD display
- Low power consumption
- Battery-powered — up to 10 hours of charge on an internal rechargeable Li-Ion 680mAh battery
- No external power supply required
- Supports storing up to 16 configurations / data files on Flasher
- Easy push-button selection between multiple images / configurations stored on Flasher
- Multi-platform:  
Includes setup and control software for Linux, macOS and Windows.
- One time cost — no additional license fees

## USE CASES

- ➔ Field service programming for non-network devices
- ➔ Exclusive & secure flashing for in-field services



# Flasher Secure



The flash programmer for authenticated off-site production

## Authorized Flashing

The Flasher Secure can limit the number of flash programming cycles, thereby limiting the number of devices to which the firmware can be transferred. This protects the IP against unauthorized access.

## High-speed programming

Flash programmers are designed to achieve top programming speeds, coming very close to the theoretical minimum programming time of the target hardware.

## Flexible control and monitoring

The Flasher Secure is easy to set up and operate using SEGGER software tools. It can be used in either stand-alone or PC-based programming mode.

## End-to-end security

The Flasher Secure supports trusted firmware features to ensure end-to-end encryption, authentication and confidentiality, covering the whole process including encrypted programming of many devices, even those not supporting it by design.

## Flasher Secure Control Server

The Flasher Secure Control Server runs in a trusted environment and authorizes signatures which are tied to the hardware. It also allows widely customizable serial number generation for automatic assignment in production to track e.g. date, manufacturer, used Flasher, etc.

## Key features

- Authenticated production with full visibility
- Production volume control
- Supports microcontrollers with unique IDs
- Prevents production of counterfeit units
- Centralized management of assigned Flashers - worldwide
- Multi-platform:  
Includes setup and control software for Linux, macOS and Windows.
- One time cost – no additional license fees
- Centralized management of assigned Flashers - worldwide



### USE CASES

- ➔ IP protection for secure device management at contract manufacturers

