

# Renesas Ready Ecosystem Partner Solution

## SMH FlashRunner High-Speed



PARTNER  
NETWORK

READY

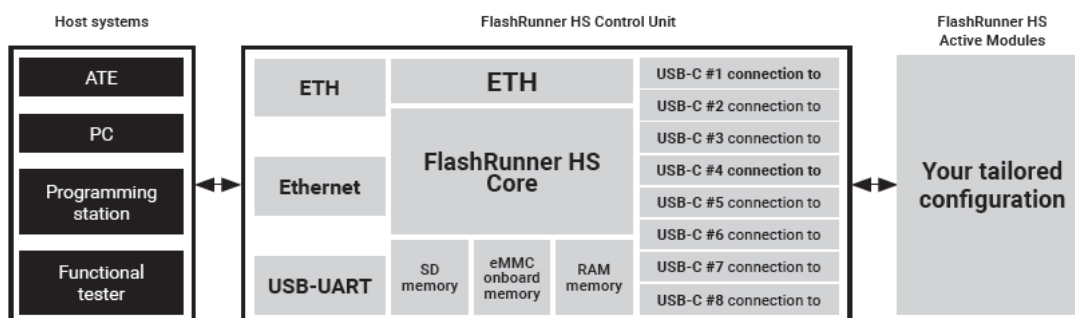
### Solution Summary

FlashRunner High-Speed is a universal parallel In-System Programmer supporting up to 32 targets in parallel. FlashRunner High-Speed combines high-level programming performances and high modularity to deliver a multi-end programming solution. The Control Unit is the central management coordinating different technologies for each peripheral Active Module. Support is available for the [RA Family](#), [RX Family](#) and [RL78 Family](#).

### Features/Benefits

- Supports wide range of Renesas products: [Renesas – SMH Technologies \(smh-tech.com\)](https://smh-tech.com)
- LAN and USB connection and control:
  - User-friendly GUI
  - SDK/API: DLL in C/C++ and C#
  - Command Line control
- Standalone control
- Data protection with user's firmware encryption
- Device's security features supported
- Dynamic memory: change firmware content dynamically for, i.e., serial numbering
- Board supply voltage and current up to 12 V and 200 mA
- Big size memories high data transfer rate

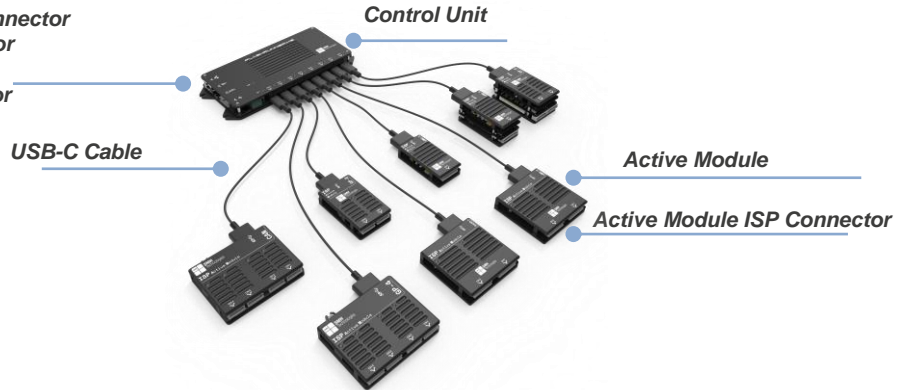
### Diagrams/Graphics



### Target Markets and Applications

- Automotive
- In-System Programming
- White Goods
- Smart Sensors
- Industry 4.0

**Standalone Control Connector**  
**Power Supply Connector**  
**USB Host Interface**  
**Relay Control Connector**  
**Ethernet Host Interface**



**High Speed: up to 80 MHz of communication frequency**



**Universal: BDM, JTAG, SWD, UART, FINE, CSI, I2C, SPI, ICSP, eMMC ...**



**Parallel: different devices, communication protocols and source files in parallel. Dedicated Active Module for NAND, eMMC, OCTO-SPI memories ...**



**Industrial: meant for Industrial production with high volumes. Active Modules available with Relay Barrier for integration.**



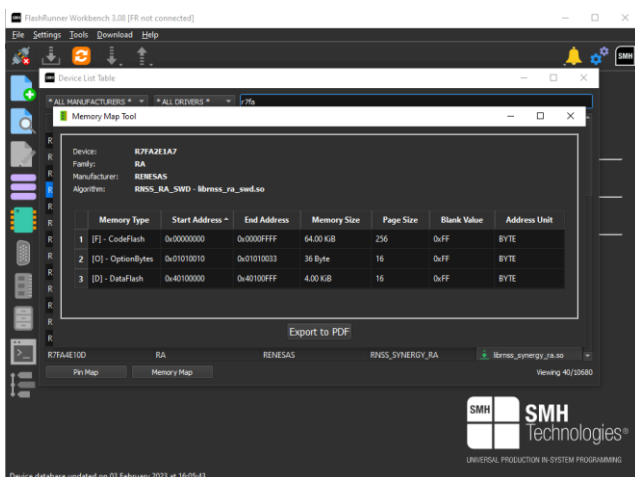
**12000 devices supported: always increasing**



**Compact: Control Unit 170x83x19 mm 8 channels, eMMC Active Module 67x32x15 mm General Purpose Active Module 66x80x16 mm 4 channels, USB-C up to 3 m**



**GUI Graphical User Interface to control FlashRunner High Speed Technology**



## CONTROL & PRODUCTION

- Programming times
- Connections
- Memory Maps



## COMMAND

- Project Wizard and Execution
- File Transfer Manager
- System Update



## SECURITY

- Firmware Encryption
- User Management
- Dump and Read

[Contact SMH distributors](#)