

PRODUCT PRESENTATION SHEET

Flash Bootloader by NTT DATA Romania: Your Trusted Partner for Controller Programming

About our flash bootloader

The NTT DATA BoLo is a cutting-edge universal solution designed for the efficient and secure reprogramming of programmable controllers, tailored to meet the demands of modern embedded projects. Developed with a focus on flexibility, security, and performance, it integrates seamlessly into various embedded systems to ensure smooth operation and superior results.



The features

Configuration Tool

Simplifies customization, allowing quick adaptation to specific project requirements.

Bootloader Updater

Possibility to also update the bootloader itself.

State-of-the-Art Security and Safety

Supports multiple protection mechanisms like secure boot, secure access, cyclic-redundancy-check (CRC) and encryption for robust protection against cyber threats.

Delta Download

Minimizes data transfer by updating only the changed parts, saving time and resources.

On-the-Fly Programming

Allows real-time reprogramming without interrupting system operations.

AUTOMOTIVE SPECIFIC FEATURES

Full UDS (ISO-14229) Compliance

Meets international standards for diagnostic communication and flashing, ensuring broad compatibility.

Supports Major Bus Systems

Compatible with CAN/CANFD, LIN, ETH, and FlexRay, covering the most widely used communication protocols in the automotive industry.

Based on AUTOSAR Architecture

Built on the automotive industry-standard framework for interoperability, adaptability and modularity, ensuring a wide applicability.

XCP Flashing Option

Supports flashing via XCP for end-of-line process optimization.

NTT can offer a working product, and at the same time the configuration and integration of this product into the client's project landscape, assuming full accountability. This is supported by NTT's team high experience in configuring and integrating automotive solutions

NTT can offer an end-to-end infrastructure (cloud) for SW flashing services, besides the classical bootloader

The benefits



Fully Configurable

Tailor the solution to optimize the memory footprint and performance based on specific project needs.



Efficient Downloads

Leverages advanced optimization techniques such as compression and multi-buffer updates to accelerate data transfer.



Dedicated Consulting

Benefit from close collaboration with our expert development team, ensuring tailored solutions and smooth integration.



Customizable & Client-Specific

We provide comprehensive support for customizing our product with a variety of add-ons designed to cater to unique project requirements.



End-to-End Integration by NTT

Delegate the complete Bootloader integration to our dedicated team offering direct accountability and expert execution.



Quality-Driven Development

Our product is developed according to the high standards set for automotive development, following the ASPICE Process. This includes continuous integration and full traceability across all testing levels, as well as static code analysis. We utilize widely recognized industry tools to ensure the highest quality throughout the development lifecycle.

5 of top 10 world automotive manufacturers are our clients

AUTOMOTIVE SPECIFIC BENEFITS



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EXTENDED PRODUCT FEATURES LIST:

Legend:

<i>HW Dependent</i>	Feature not implemented	Feature partial implemented
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Basic Functions	Communication	Diagnostics	Flashing features	Safety & Security	Process & Quality	Extras
App interface	CAN	AUTOSAR DiaStack	Dual-buffer	SW CRC	Architecture	Flashing tool
Watchdog	LIN	UDS	Compression	HW CRC	Configuration support	CI
Flash driver (RAM)	ETH	Basic Flashing Jobs	Resumable programming	UDS security access	Requirements	Automated Testing
NVM stack	XCP	DET	Encryption	Secure Boot	Detailed design	Configuration tool
Standalone Bootmanager	CAN-FD	Aux flashing jobs	Delta Download	Authenticated Boot	Static code analysis	Other compilers
Bootloader Updater	OTA	Aux jobs	On-the-fly programming	Crypto algorithms	Unit test	Other MCUs
Block-Management	(FLEXRAY)		Multi-partition		ASPICE L2	
External FLASH			Multicore			

Request a live demo

Discover how the NTT DATA flash bootloader can simplify embedded controller reprogramming. Request a demo to see its features, seamless integration, and secure performance, by writing us at:

nttdata@nttdata.com

