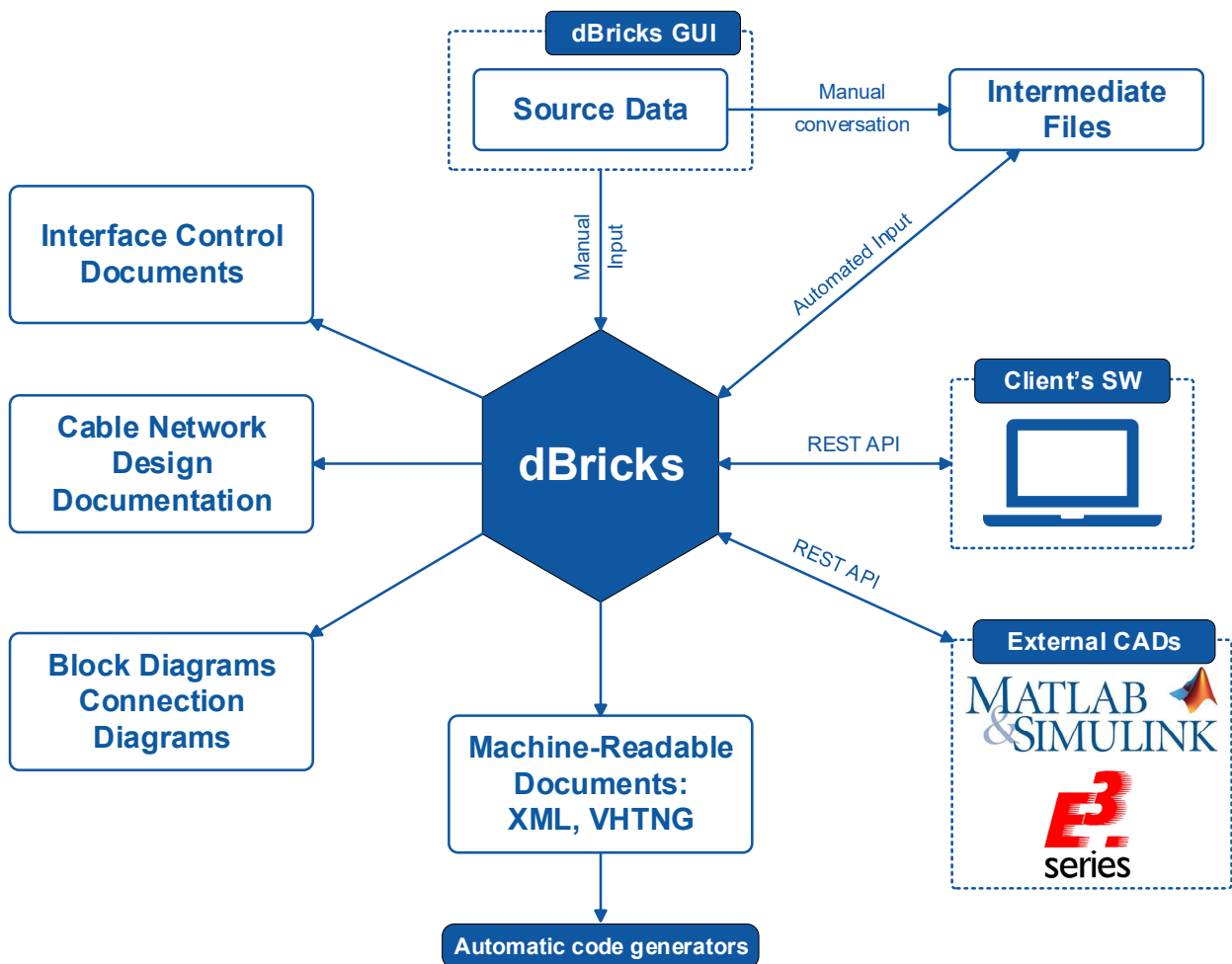




The System Engineers Tool

developed by  **PEERSS**

dBricks is a tool that helps system engineers with the automated development and integration of electronic devices. To do this, a complete data model of the system interfaces is created in **dBricks**. Such an interface model allows engineers to generate wide range of documents, easily manage interface configurations and integrate with third-party tools. The **dBricks** system consists of a normalized database and client graphical user interface part for data input, output and modification.



Our Partners



dBricks Purpose



Reduce efforts to develop electronic equipment



Minimize costs in system testing and commissioning



Improve developed documentation quality

dBricks key features*	Benefits
<p>System design:</p> <ul style="list-style-type: none"> - Centralized (server based) system development - Template based modular design - ICD Management with standardized interface transport layers - Complete description of physical and logical connections as well as data transfer process between devices <p>Interfaces description management: Automated checks of integrity and correctness of data that are added and stored in dBricks</p>	<ul style="list-style-type: none"> ✓ Common environment for all collaborators ✓ Design of an interface model ✓ Compatibility of data in the model and project documentation ✓ Equipment interface data export into a user-defined format ✓ Consistency of units, dimensions and bus IO ✓ Validated data transfer process compliant to industry standards and corporate regulatory documents ✓ Digital buses load control ✓ Physical connections control
<p>Design documentation generation</p> <ul style="list-style-type: none"> - Interface Control Documents (ICD) development - Generation of cable development documentations for aircrafts, test benches, flight simulators, etc. - Generation of various schemes and auxiliary reports/documents 	<ul style="list-style-type: none"> ✓ Automated documentation development ✓ Guarantee of compliance to project regulatory requirements for all documents ✓ Data consistency for all generated documents ✓ Avoidance of manual paperwork to show the stage of development
<p>Generation of interface descriptions files in machine-readable formats</p> <ul style="list-style-type: none"> - VHTNG (Virtual and Hybrid Testing Next Generation), ADS2R2 configuration files - Generation of source data for avionics software with tools designed for AE development - Automatic code generators for applications 	<ul style="list-style-type: none"> ✓ No manual coding errors ✓ Time savings due to fast code retrieve and update if source data was modified ✓ Easy code customization (transfer) to different test benches and modules
<p>Integration with external CADs</p> <ul style="list-style-type: none"> - Open REST API for customized data access - Standardized and customized import and export functions (e.g. to MATLAB/Simulink, E3.Series) 	<ul style="list-style-type: none"> ✓ No errors caused by manual data transfer to CAD systems ✓ Fast data transfer to third-party tools ✓ Development process automation ✓ Seamless design process

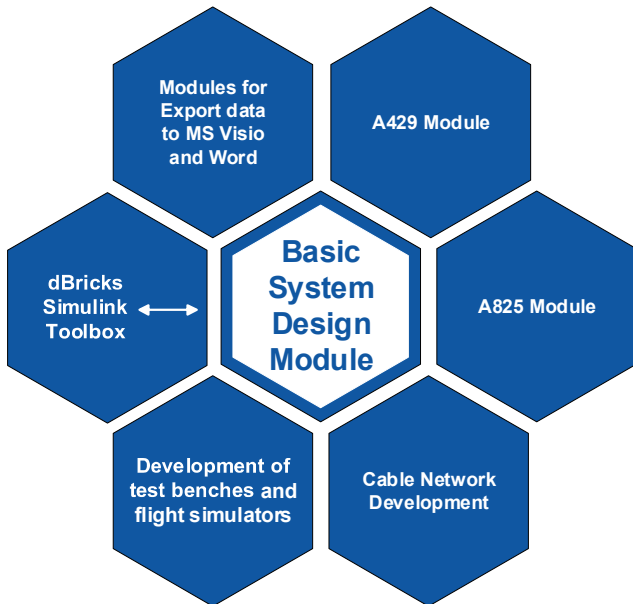
*You can find more details [on our site](http://www.peerss.ru/en/dbricks/) www.peerss.ru/en/dbricks/

Configure dBricks and Pay Only For Modules You Need!

dBricks main functions are provided in the base module that proceeds with the basis of the system such as: device templates, connectors, contacts, buses, port contents, device functions and their links, logic description, etc. The developed system is described in the base module as a project consisting of basic elements. Based on this information the basic system design module allows to generate documents, diagrams and different reports.

Depending on the tasks, the **dBricks** functionality can be expanded through various integrated modules.

Example of dBricks configuration:



List of available dBricks modules*:

- ✓ ARINC 429 module
- ✓ ARINC 825 module
- ✓ ARINC 664 (AFDX©) module (incl. ARINC 653)
- ✓ Generic Serial Protocols
- ✓ ICD export to MS Word module
- ✓ Bus topology development module
- ✓ Harness development module
- ✓ Export configurations module of information exchange Hardware-In-the-Loop test benches
- ✓ Toolbox for development of test bench and flight simulator cabling
- ✓ MathWorks Simulink integration Toolbox

* You can find detailed descriptions of each module [on our site](http://www.peerss.ru/en/dbricks/) www.peerss.ru/en/dbricks/

Description of Some dBricks Possibilities



Any predefined structure machine-readable files can be generated with **dBricks**



Access **dBricks** data with your own scripts and queries. The open REST-API allows direct exchange with the data stored in **dBricks** without having to use the user interface.

This gives you complete freedom of action, such as integrating **dBricks** into existing toolchains, generating specific documents, data synchronization and much more

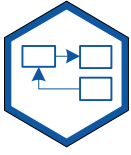
dBricks is Developed for:



ICD developers



Software developers



System engineers



Wiring and Harness developers



Test benches and flight simulators developers

Estimated Labor Savings*

1. Development of block and schematic diagrams



2. Development of interface control documents



3. Development of avionics software specifications

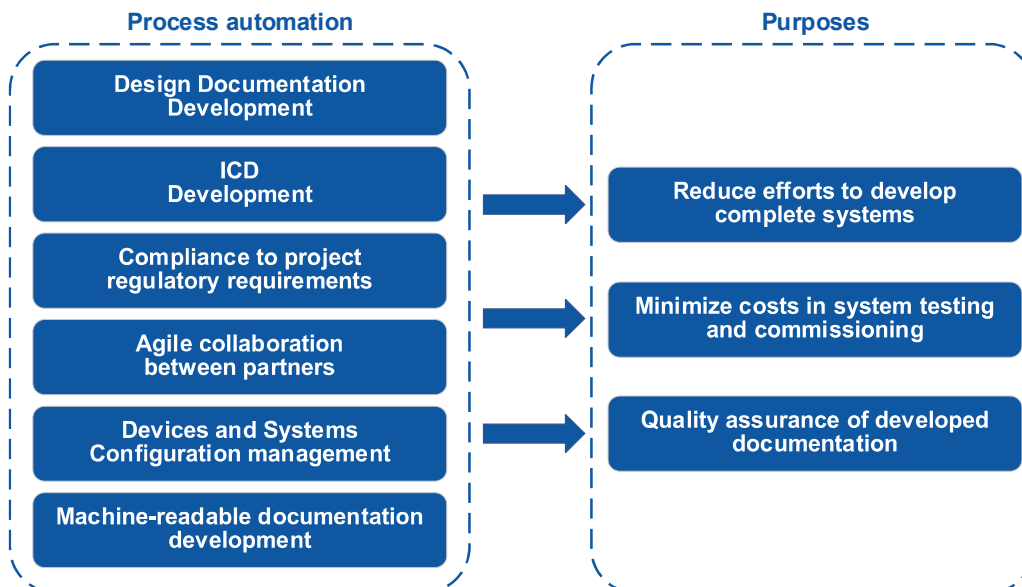


4. Development of test benches



*The assessment was conducted based on Avionics projects for commercial aircrafts

How Does dBricks Help to Lower Labor Efforts?



dBricks-Based Services:

- ✓ System Development
- ✓ Transfer customer documentation Into **dBricks**
- ✓ Interface Control Documents Development
- ✓ Design of onboard electronics test benches (Hardware-In-the-Loop, Model-In-the-Loop)

- ✓ Development of Wiring Design Documentation
- ✓ Operation Programs Development
- ✓ Onboard Devices and Entire System Data Models Development
- ✓ **dBricks** trainings

Warranties and Support:

- ✓ **dBricks** default warranty period is 1 year.
This includes users' technical support, software and operational documentation updates, software troubleshooting, tutorials and trainings
- ✓ Aftersales services under a standalone agreement

Licensing options:

- ✓ One-time purchase of the required number of licenses
- ✓ Purchase the number of licenses required at a particular time on a subscription basis
- ✓ Installation on the customer's server or access to a cloud version of **dBricks**

- ✓ License price depends on the required functionality (modular structure, only pay what you need)
- ✓ Implementation of pilot projects and free demo access
(for more details please visit <https://www.peerss.ru/en/dbricks/>)

www.peerss.ru/en
info@peerss.ru

Zhukovsky, Moscow region 140180, Russian Federation
Tel. +7 495 118 42 98

