

What's New in RAM Commander Version 8.9

This document describes new features of **RAM Commander Version 8.9**. The document covers only the features which were added to the RAM Commander 8.9 since version 8.8 SP3. Please, see previous documents for earlier versions features additions.

General

- Limitation on the reports size has been removed.

Reliability and RBD

- Added: **IEC 61709** standard for reliability prediction
- New fields added to the Component Library format
- CompLibImport.xls file updated
- New fields added to the Import Wizard
- Improvements in the GPRD module operations

Bug fixes

- [4399312063] Display of the Quality Level and Pie_q for methods not supporting these parameters
- [5701250424] Component data exchange with Component library improved
- [4493084975] Caption issue in Cross Reference fixed
- [5701274446] RBD overlap after using "Add Parallel Branch"
- [5116043079] FMECA crash with many NHE columns

The new features and improvements listed above are explained in the following pages.

Installation of RAMC 8.9

For the local standalone installation: download and run the RAMCW89.EXE from the ALD web site (<https://www.aldsoftware.com/download/downform.aspx?id=112>),

or

run RAMC\setup.exe from the installation CD.

If you upgrade RAM Commander from an older installed version, choose the same folder where a previous version is installed.

For the client-server installation see User Manual - Installation Guide ([Getting Started Chapter](#)).

When upgrading an older RAM Commander version to 8.9 version in Client/Server model: RAM Commander version 8.9 can be installed **only over 8.0 and above**. If you have an earlier version, upgrade it to 8.0 first.

If you wish to upgrade 8.8 to 8.9, you need to upgrade only the Server PC: run RAM Commander installation on the server, choose "Server" configuration. Workstations will be upgraded automatically on the first RAM Commander run. This will save your IT a lot of work.

For additional instructions, see User Manual Installation Guide ([Getting Started Chapter](#)).

Tip: New charts presentation requires Microsoft .NET Framework 4.0. Try running RAM Commander and generating any graph – if you get warning messages and see old graphs presentation – try installing the Microsoft .NET Framework 4.0. You can get it from Microsoft: <http://www.microsoft.com/en-us/download/details.aspx?id=17718>. You must have administrator privileges to install the .NET Framework 4.

RAM Commander Version 8.9 Release Notes

Limitation on the reports size

Limitation on the reports size has been removed.

This means that in RAM Commander 8.9 most of the reports can be generated and displayed without applying any filters. For example, Component Library report showing more than 250,000 records (Resistors from Global Library), can be generated and presented in full.

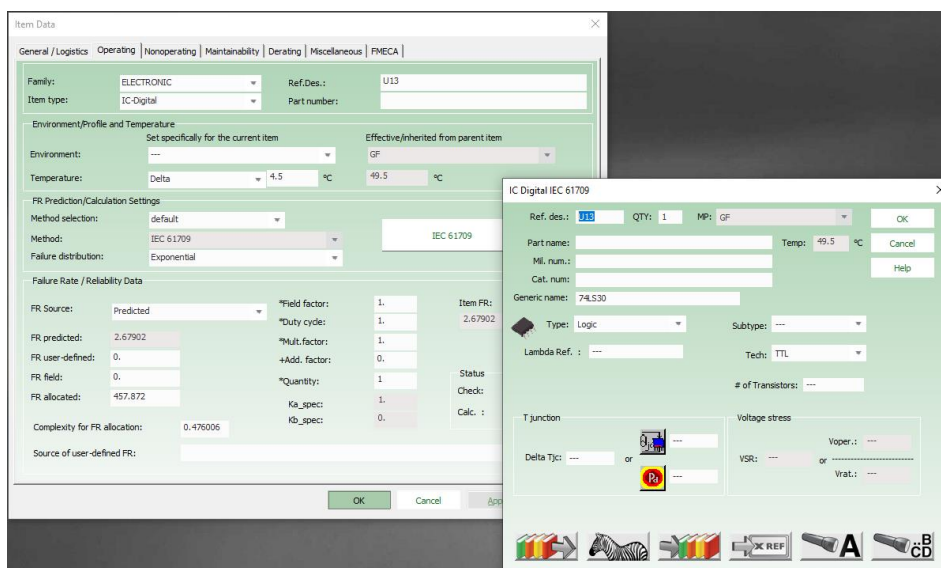
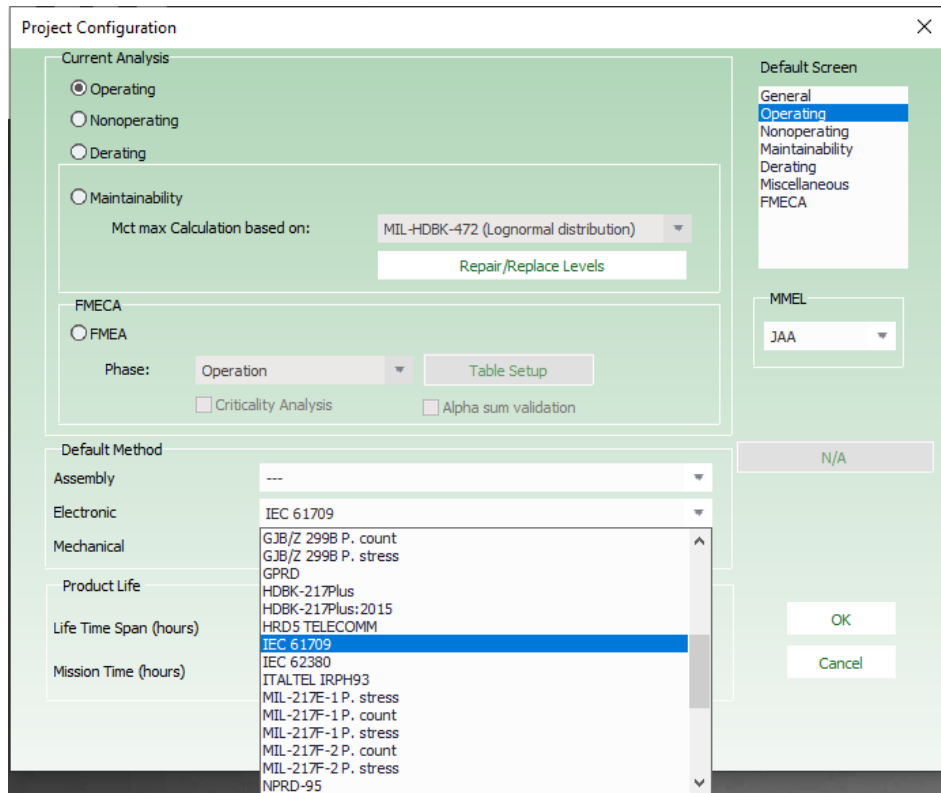
The screenshot shows the RAM Commander interface with a 'Library Report' for resistors. The report is titled 'Library Report for Project TUTORIAL Drive C:' and is for the 'ELECTRONIC, Resistor' component. The table below represents the data shown in the report.

Generic name	Style	Resistance	Prated	Characteristic (RE, RER)	Quality	# of res/ package(RZ)	T1 [°C]	S1 [%]	T2 [°C]	S2 [%]	Data source
RES 160 OHM	RL	160.0000 OHM	---	---	---	---	---	---	---	---	ALD
RES 2.7 K	RL	2.7000 KOHM	---	---	---	---	---	---	---	---	ALD
RES 24 K	RL	24.0000 KOHM	---	---	---	---	---	---	---	---	ALD
RES 4.7 K	RL	4.7000 KOHM	---	---	---	---	---	---	---	---	ALD
RES 47 OHM	RL	47.0000 OHM	---	---	---	---	---	---	---	---	ALD
RES 5.1 K	RL	5.1000 KOHM	---	---	---	---	---	---	---	---	ALD
RES 82 OHM	RL	82.0000 OHM	---	---	---	---	---	---	---	---	ALD
0402L010SLYR	---	---	---	---	---	---	---	---	---	---	ALD
0402L035SLYR	---	---	---	---	---	---	---	---	---	---	ALD
0603L010YR	---	---	---	---	---	---	---	---	---	---	ALD
0603L025YR	---	---	---	---	---	---	---	---	---	---	ALD
0603L035YR	---	---	---	---	---	---	---	---	---	---	ALD
0603L050YR	---	---	---	---	---	---	---	---	---	---	ALD
0603L150SLYR	---	---	---	---	---	---	---	---	---	---	ALD
06R075BPR	---	---	---	---	---	---	---	---	---	---	ALD
06R075BU	---	---	---	---	---	---	---	---	---	---	ALD
06R120BPR	---	---	---	---	---	---	---	---	---	---	ALD
06R120BU	---	---	---	---	---	---	---	---	---	---	ALD
06R155BPR	---	---	---	---	---	---	---	---	---	---	ALD
06R155BU	---	---	---	---	---	---	---	---	---	---	ALD
06SL190GM	---	---	---	---	---	---	---	---	---	---	ALD
06SL370GM	---	---	---	---	---	---	---	---	---	---	ALD
0805L010YR	---	---	---	---	---	---	---	---	---	---	ALD
0805L020YR	---	---	---	---	---	---	---	---	---	---	ALD
0805L035YR	---	---	---	---	---	---	---	---	---	---	ALD
0805L050YR	---	---	---	---	---	---	---	---	---	---	ALD
0805L150SLYR	---	---	---	---	---	---	---	---	---	---	ALD
0805L035YRHF	---	---	---	---	---	---	---	---	---	---	ALD
0805L050VH	---	---	---	---	---	---	---	---	---	---	ALD
0805L075SLYR	---	---	---	---	---	---	---	---	---	---	ALD
08R120BPR	---	---	---	---	---	---	---	---	---	---	ALD
08R120BU	---	---	---	---	---	---	---	---	---	---	ALD
08R155BPR	---	---	---	---	---	---	---	---	---	---	ALD
08R155BU	---	---	---	---	---	---	---	---	---	---	ALD
08SL190GM	---	---	---	---	---	---	---	---	---	---	ALD

Reliability and RBD

IEC 61709

The new version of RAM Commander implements the IEC 61709 Standard "Electric components – Reliability – Reference conditions for failure rates and stress models for conversion". Select the IEC 61709 standard from the list of reliability prediction methods on the RAM Commander dialog.



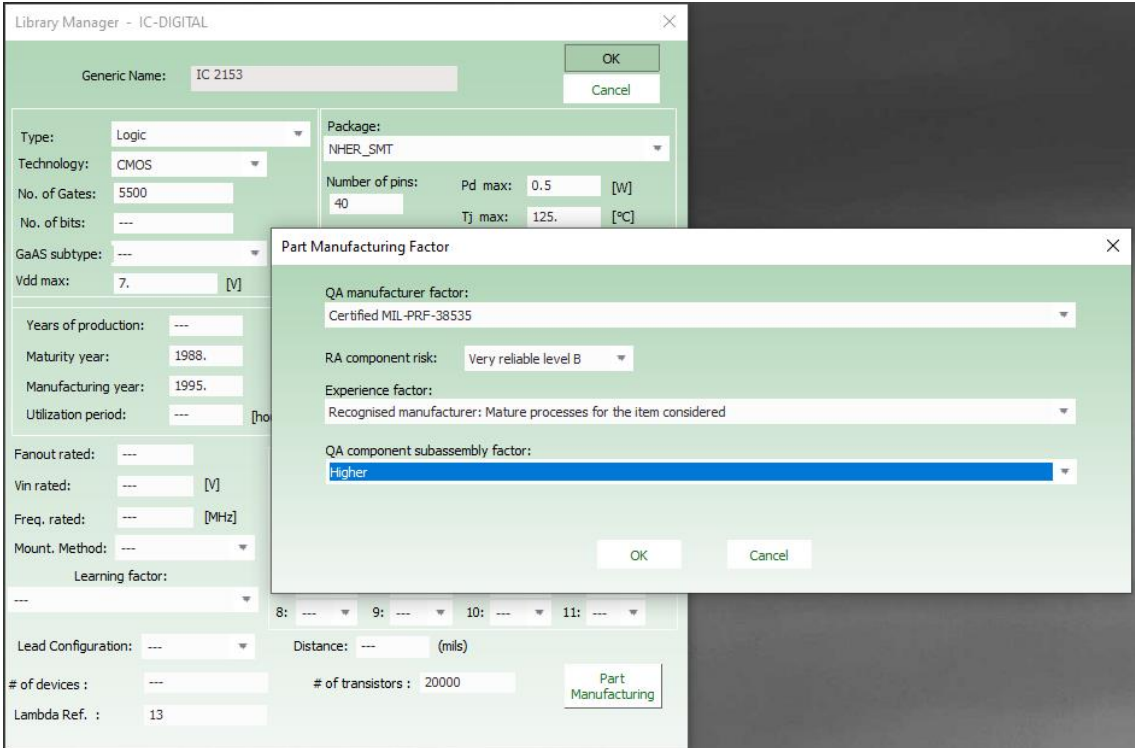
Important: The IEC 61709 Standard requires specification of the reference failure rate. As mentioned in the document (page 11): "This document does not contain failure rates, but it describes how they can be stated and used. This approach allows a user to select the most relevant and up to date failure rates for the prediction from a source that they select."

In the RAM Commander all reference failure rates by default are set to 1 FIT. User can enter specific value or / and change the default value.

New fields added to the Component Library format

A number of different fields have been added to the Component Library format. The table below presents the fields list, together with prediction standard they come from:

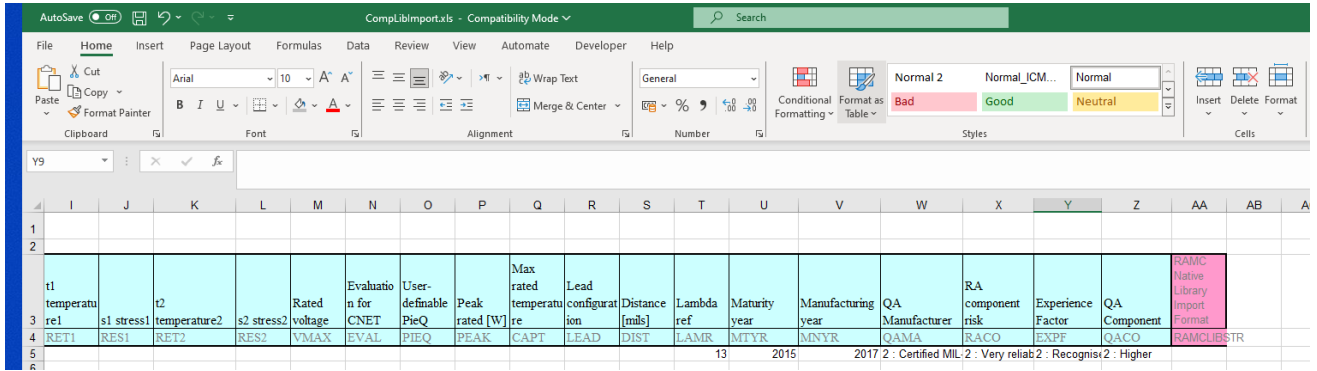
#	Field	Component (Item) Type	Prediction Method
1.	Lambda Ref. (Reference failure rate)	All supported components	IEC 61709
2.	# of transistors	IC Digital	IEC 61709
3.	QA manufacturing factor	All supported components	FIDES
4.	QA component subassembly factor	All supported components	FIDES
5.	RA component risk	All supported components	FIDES
6.	Experience factor	All supported components	FIDES
7.	Year of maturity	Different components	217Plus
8.	Year of manufacture	Different components	217Plus



Update of the CompLibImport.xls file

CompLibImport.xls file, used during import into Component Library, has been updated in order to support new fields. The list of the fields is presented in the previous paragraph.

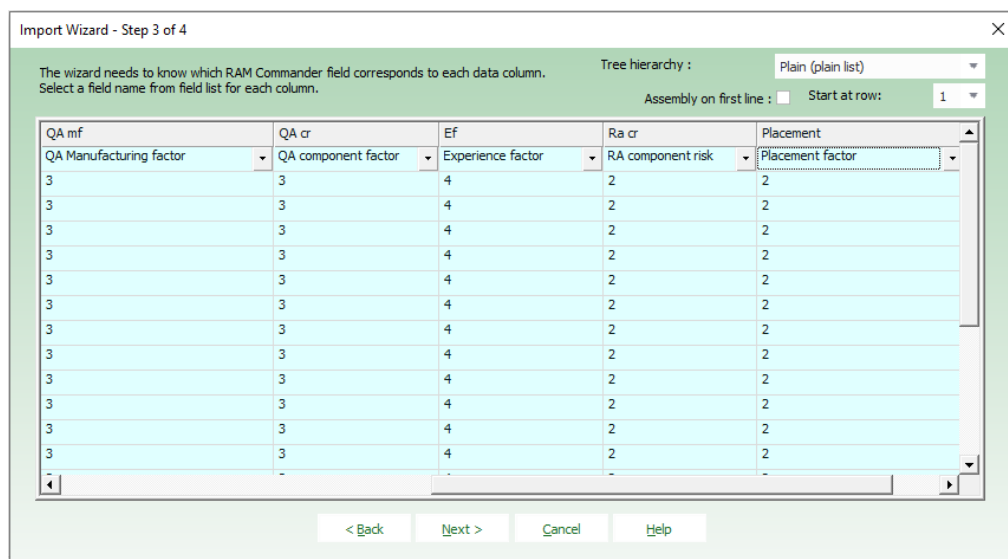
Please, refer to the CompLibImport.xls file located in the LIB folder of the RAM Commander installation.



New fields added to the Import Wizard

Additional fields related to the FIDES standard are now supported by Import Wizard. The following fields are supported in RAM Commander 8.9 :

#	Field	Component (Item) Type	Prediction Method
1.	QA manufacturing factor	All supported components	FIDES
2.	QA component subassembly factor	All supported components	FIDES
3.	RA component risk	All supported components	FIDES
4.	Experience factor	All supported components	FIDES
5.	Placement factor	All supported components	FIDES



Improvements in GPRD module operation

When user creates an item and searches it by Part Number in the GPRD, in case Part Number already exists in the Global GPRD library, RAM Commander only establishes a link to the GPRD record in the Global library. **Global GPRD record is not copied to the Project GPRD record.**

If the user wishes to send Project backup with all relevant data embedded, the user needs to open Project GPRD library and activate menu Library → Copy from Global. All relevant records from the Global GPRD library will be then copied into the Project GPRD library.

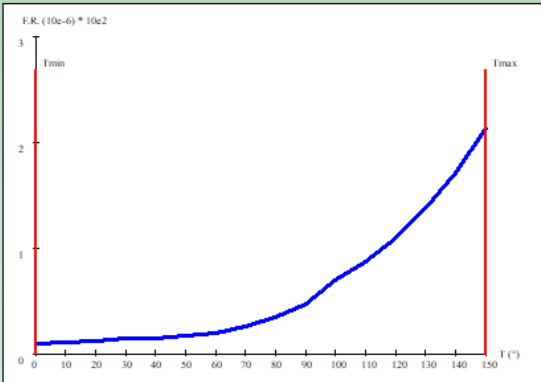
Important: When a user who is not defined as a RAM Commander System Manager opens the Global GPRD record, all fields at the Global GPRD screen will appear as disabled. Only RAM Commander System Manager can modify Global GPRD records.

GPRD - Operating ✕

Part Number: Environment: Use for conversion

Global Tmin: Tmax: Source:

#	Temperature	F. R.
1	0.0	
2	5.0	
3	10.0	
4	15.0	
5	20.0	
6	25.0	
7	30.0	
8	35.0	14.00
9	40.0	
10	45.0	
11	50.0	
12	55.0	
13	60.0	
14	65.0	
15	70.0	
16	75.0	



F.R. (10e-6) * 10e2

Tmin Tmax

T (°C)

FR (or MTBF) interpolation/extrapolation is done according to provided FR(temperature) points.

For electronic family components or assemblies (Family="----") calculation is done according to RAC Reliability Toolkit formulas.

For mechanical and electro-mechanical family components linear interpolation/extrapolation is used.

Data Link:

RAM Commander Customer Support

For any question or request contact us:

support@aldservice.com with **RAM Commander** in the **Subject** line of your mail

We look forward to hearing about your experience with RAM Commander and plan to periodically send you a Feedback Form.



E-mail: support@aldservice.com

www.aldservice.com