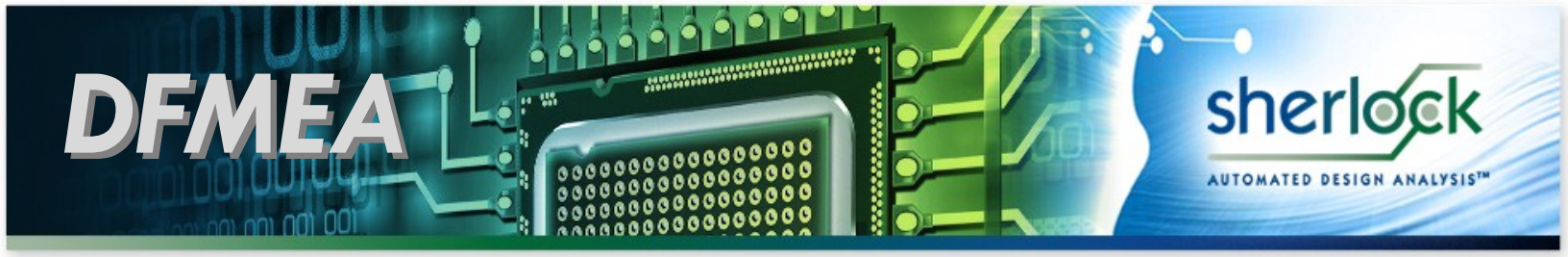


Speed Up Your DFMEA Process with Sherlock

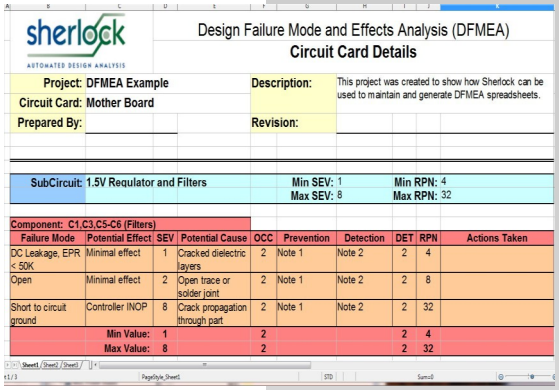
Design Failure Mode and Effects Analysis (DFMEA) is a critical process in electronics design. It allows design engineers to identify and correct potential failure modes early in the design process, improving overall product reliability, decreasing cost and enhancing customer satisfaction. But with increasingly complex electronics components, the time required to complete a DFMEA can take weeks, adding to costs and product delays.

Automate to Save Time and Money

Now with Sherlock Automated Design Analysis™ Software, by DfR Solutions, you can throw away those manual spread sheets or other tools and eliminate countless hours manually populating and compiling failure mode and effects analyses (FMEAs). Sherlock Automated Design Analysis™ Software automates most of the time consuming DFMEA process, potentially saving you and your organization up to thousands of hours every year.

Automatically Pre-populate Your DFMEA Spreadsheet

Sherlock is the only available software tool that takes your standard design files (bill of materials, net lists, Gerber, etc.) and automatically prepopulates DFMEA reports with reference designators, component technology (capacitor, resistor, etc.), and failure mode (open, short).



sherlock AUTOMATED DESIGN ANALYSIS

Design Failure Mode and Effects Analysis (DFMEA)
Circuit Card Details

Project: DFMEA Example		Description:	This project was created to show how Sherlock can be used to maintain and generate DFMEA spreadsheets.
Circuit Card: Mother Board			
Prepared By:		Revision:	

SubCircuit: 1.5V Regulator and Filters		Min SEV: 1	Min RPN: 4
		Max SEV: 8	Max RPN: 32

Component: C1,C3,C5-C6 (Filters)

Failure Mode	Potential Effect	SEV	Potential Cause	OCC	Prevention	Detection	DET	RPN	Actions Taken
DC Leakage, EPR < 50K	Minimal effect	1	Cracked dielectric layers	2	Note 1	Note 2	2	4	
Open	Minimal effect	2	Open trace or solder joint	2	Note 1	Note 2	2	8	
Short to circuit ground	Controller INOP	8	Crack propagation through part	2	Note 1	Note 2	2	32	
	Min Value:	1		2			2	4	
	Max Value:	8		2			2	32	

Sherlock is Fast and Smart

Specializing in electronics design reliability, Sherlock automatically performs a comprehensive review of pin location and net and automatically removes non-relevant shorting events, such as electrical shorts within the same circuit net. All this occurs within a matter of seconds and is not limited by the size of the design or the number of components.

Complex Boards Simplified

Sherlock's unique nesting capability allows designers to more easily analyze complex boards. Sherlock nests DFMEA worksheets for ease of organization and visibility enabling designers to view the overall circuit as well as sub circuits and components.

Sherlock is:

Fast

Easy

Unique

Standards:
AIAG
SAEJ1739
Complies with
ISO 26262

Call for more information
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Fax: (240) 757-0053

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DfR Solutions
reliability designed, reliability delivered

About Sherlock

Sherlock Automated Design Analysis™ Software, by DfR Solutions, is a unique software tool that analyzes, grades and certifies the expected reliability of products at the circuit card assembly level.

Based on the Physics of Failure Sherlock takes the most requested qualification tests and most common customer environments and packages them for you allowing you to predict design weaknesses sooner and improve designs earlier and more cost effectively.

By evaluating material properties against the use environment to estimate product life under actual operating conditions the Sherlock analysis can be far more accurate than classic statistical or actuarial probabilistic methods.

Understanding the reliability of your product and its drivers sooner in your design cycle can result in better products being delivered sooner for significantly lower development costs.

Fast

Get Rapid feedback on product designs

Generate reports in minutes

Intuitive

Easy to deploy and use

Perfect for all levels of engineering and management

One of a Kind

Physics of Failure (PoF) analysis provides more accurate reliability predictions

Deeper and broader analysis than any other tool on the market

Sherlock is the backbone to one of the most powerful reliability tools to be released for use not just by the reliability group, but by the entire engineering design and management team. Sherlock is the future of Automated Design Analysis™ (ADA), the integration of design rules, best practices and a return to a physics based understanding of product reliability.

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