

WHY DO YOU NEED RPA IN YOUR DESIGN PROCESS?

Most Electronic OEMs dread demonstrating reliability through testing, because it can be costly, time-consuming and retrospective rather than proactive.

73% 

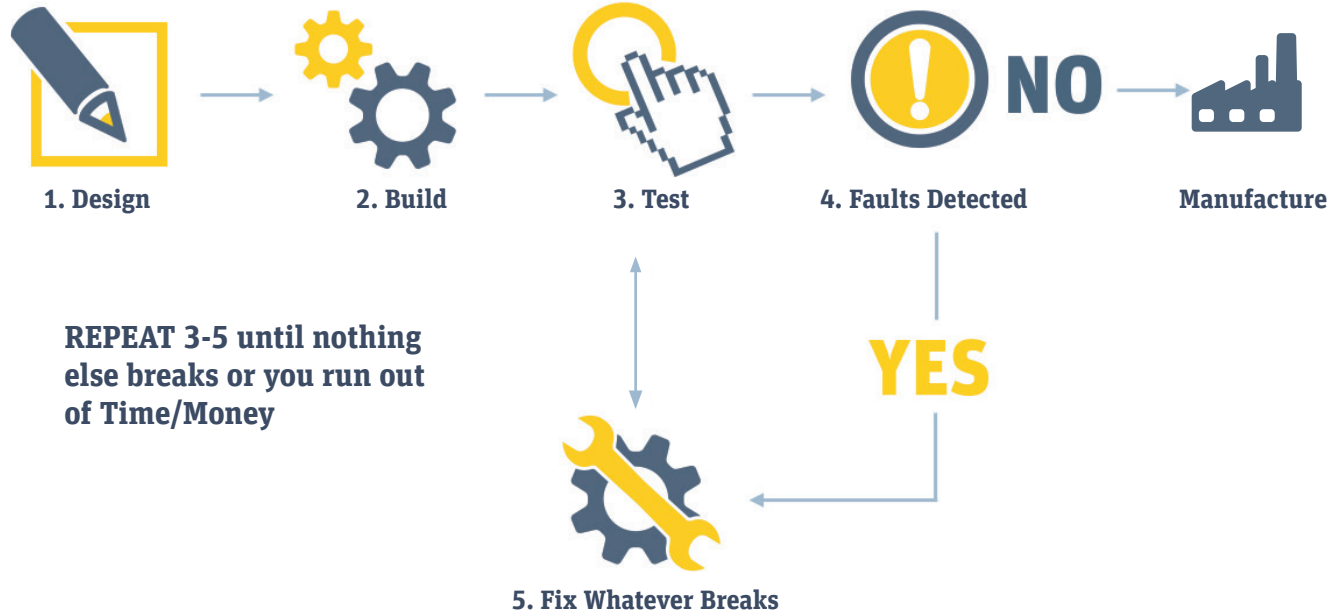
of product development costs are spent on test-fail-fix-repeat processes

Test-Fail-Fix-Repeat is not a process used in best-in-class organizations because it:

- 1 Takes too long, delaying time-to-market
- 2 Adds hidden costs, reducing product margins
- 3 Can often miss actual field issues
- 4 Stifles innovation due to the time and cost required for testing
- 5 That not relevant to the intended use of the design
- 6 Identifies problems too late in the design process

OEMs that use design analysis tools including RPA:

- ▶ Hit development costs **82% more frequently**
- ▶ Average **66% fewer re-spins**
- ▶ Save up to **\$26,000 in re-spins**



Case Study

\$7.5 MILLION IN SAVINGS FOR GLOBAL STORAGE MANUFACTURER USING SHERLOCK

10 PCBAs designed annually

\$750,000 cost per test

1 to 2 physical tests eliminated for each PCBA

Time-to-Market reduced by 6 months

“A powerful tool, especially for businesses that don't have FEA specialists. We use it to do the simulation to get the basic reliability result, and provide it to other design engineers so they can identify the weakness and improve the mechanical and electronic design layout.”

- Shufeng Li, Reliability Engineer, S&C ELECTRIC

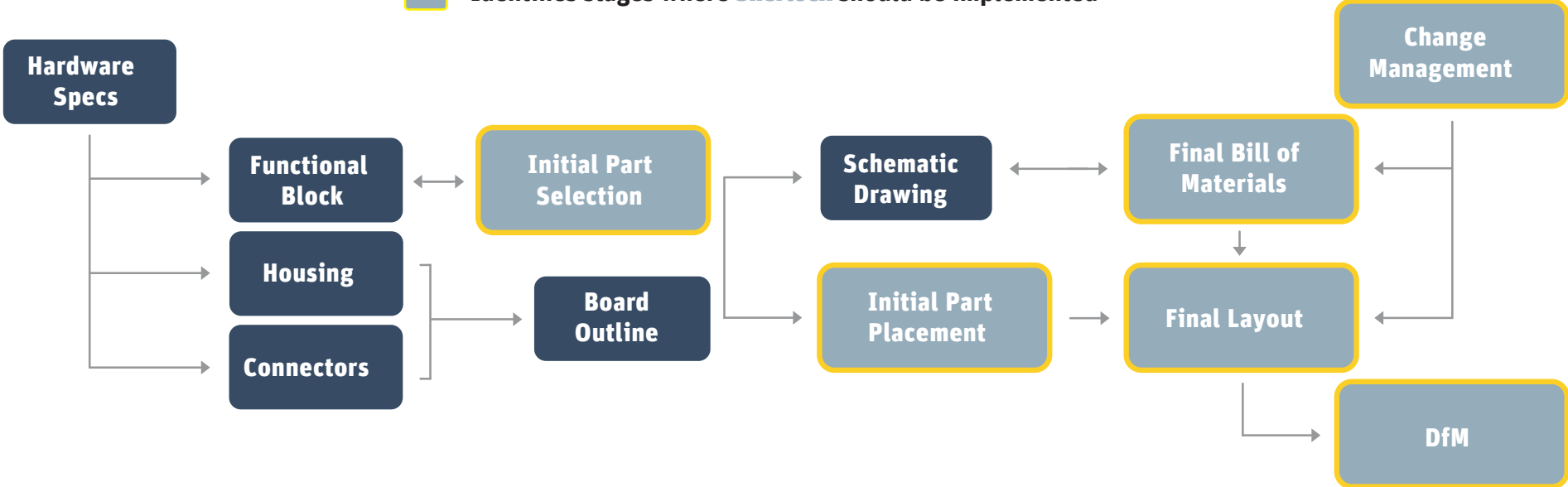
“Sherlock fills a void that other software options on the market are unable to match. Sherlock's failure prediction capabilities have been nothing short of game-changing.”

- Marty Novak, VP of Quality and Reliability, Commscope

RELIABILITY PHYSICS IN YOUR DESIGN PROCESS

STANDARD HARDWARE DESIGN PROCESS

Identifies stages where Sherlock should be implemented



MINOR ALTERATIONS TO YOUR CURRENT DESIGN PROCESS

- 1 Enhance your current design process
- 2 Seamlessly integrate with already occurring simulation
- 3 Prevent costly “test-fail-fix-repeat” cycle

RELIABILITY PHYSICS ANALYSIS

is an engineering product development methodology that applies the knowledge produced by physics of failure to produce failure-free products and systems.

ANSYS SHERLOCK AUTOMATED DESIGN ANALYSIS

software is the only reliability physics-based electronics design software that provides fast and accurate life predictions for electronic hardware at the component, board and system levels in early design stages.



Please visit www.ansys.com/products/structures/ansys-sherlock for more information

