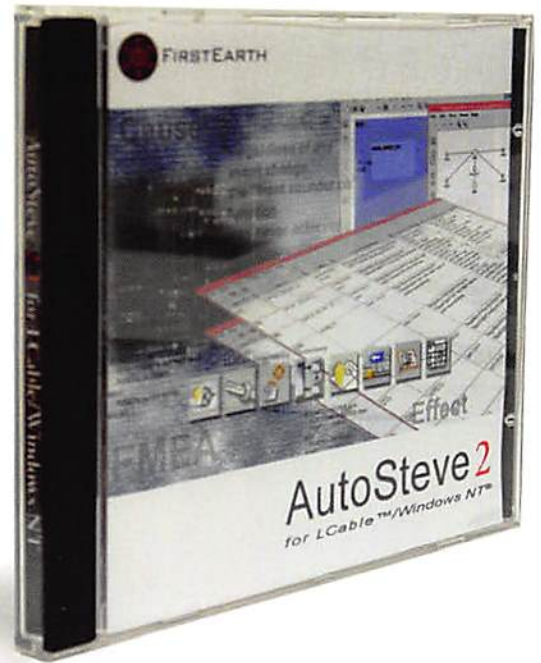


0 to FMEA in under 6 seconds

You want to reduce the time spent on electrical design FMEA, without compromising on quality. You want real feedback that schematics have been drawn correctly. You would like to perform Sneak Circuit Analysis. You are short of engineer effort in your department.



AutoSteve 2

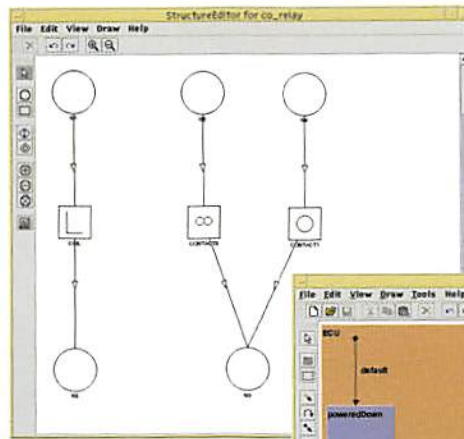
the **fastest**, **easiest** way to
perform electrical FMEA

AutoSteve, unlike other FMEA software, simulates the behavior of electrical circuits and automatically produces an FMEA report that describes the effect of failures on the circuit's functionality. It provides visual feedback of circuit operation to verify correct behavior and to illustrate faulty behavior. It detects sneak paths with high accuracy and minimal effort. It automates a lot of what Steve* does, and he wouldn't be without it.

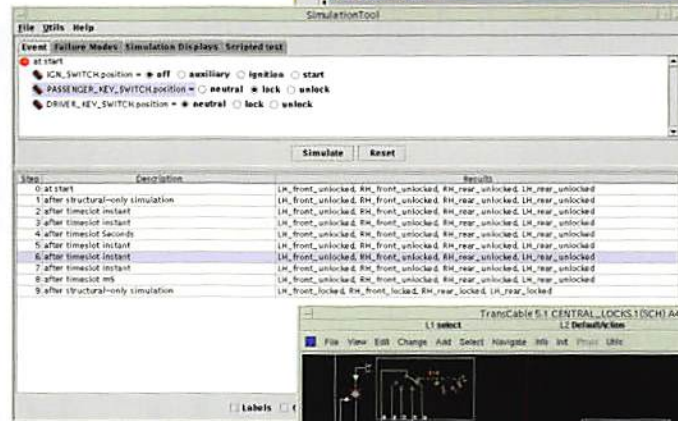
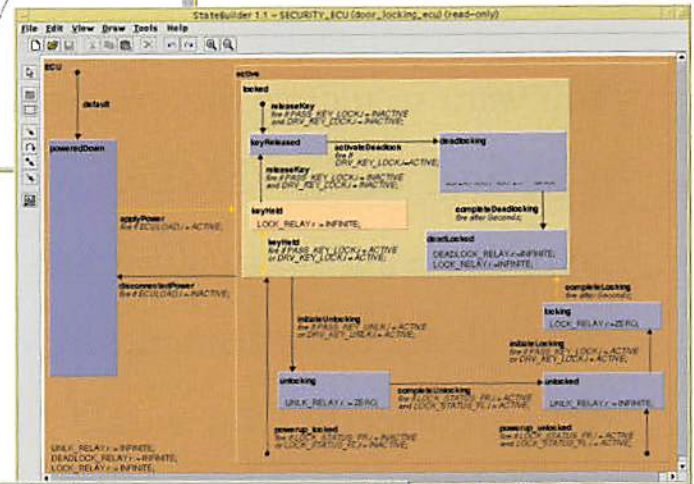
* Early versions of AutoSteve were developed with the assistance of two engineers, both from leading automotive manufacturers, who both happened to be called Steve.

Key Features

- Supports engineers by automating key stages of FMEA production.
- FMEA results are presented in an easy to read textual form, similar to those that an engineer would produce.
- Analyses a schematic in minutes.
- Information entered into AutoSteve can be reused with other schematics, therefore reducing the amount of information to be specified for new schematics.
- Models complex component behavior, e.g. ECUs, using state machines.
- Close integration with your ECAD tool.
- AutoSteve uses qualitative simulation to perform FMEA; therefore, models are easy to build and don't require the detail necessary for numerical models.
- View results of a particular failure graphically through coloring of the schematic and component state machines.
- FMEA report can be exported to other FMEA result handling software, e.g. FMEApplus.
- Find Sneak Circuits with the SCA tool.
- Perform single and multiple failure FMEA.
- AutoSteve is supplied with a library of common component models.
- Use AutoSteve's simulation tools to perform *Virtual Yellowboarding* - proving that the schematic works as designed, long before a physical prototype becomes available.
- QS9000 compliant results.

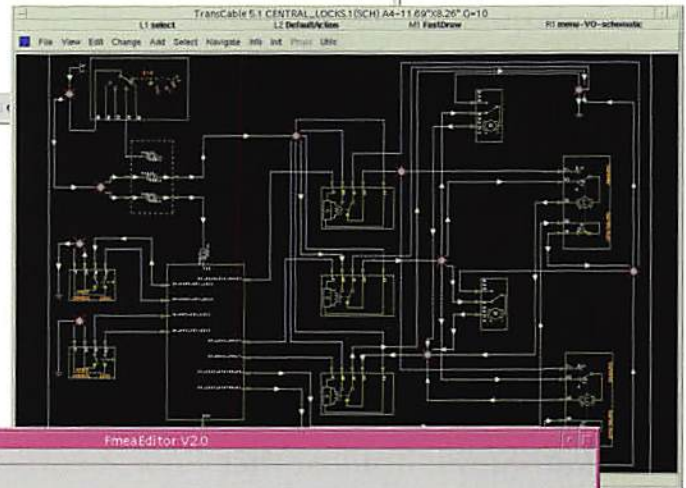


← Construct graphical models of components on the schematic. The models describe the structure and behavior of components. Complex behaviors can be modeled as state charts. ↓



← Interactively run simulations to check that the circuit is working as designed and to understand the results of running a FMEA.

Display the circuit activity for any stage of the simulation in your ECAD tool. →



Name	Failure	Potential Failure Mode	Potential Failure Effect	Potential Failure Cause	Sev	Det	Occ	RPN
HORN_H	Horn fails to sound	Regardless of any event change, the "Horn sounds" function will never be achieved	Horn fails to sound.	The component HORN_H has failure horn fails to sound	2	10	4	80
HORN_RELAY_J4	switch stuck closed	When IGNITION_SWITCH_D was set to Off (5) the "Horn sounds", "Warning Lamp illuminates" and "Frontal Bag & Belts fired" functions were achieved unexpectedly	Horn sounds unexpectedly. Lamp illuminates unexpectedly. Possible death of occupants if seated incorrectly.	The component HORN_RELAY_J4 has failure switch stuck closed	10	10	1	100
HORN_RELAY_J4	switch stuck open	When MAIN_CRASH_SENSOR was set to detected (4) the "Horn sounds" function was not achieved. Finally, regardless of any event change, the "Warning Lamp illuminates" and "Frontal Bag & Belts fired" functions were never achieved	Lamp fails to illuminate. Possible death of occupants	The component HORN_RELAY_J4 has failure switch stuck open	10	10	2	200
HORN_RELAY_J4	coil burned out	When MAIN_CRASH_SENSOR was set to detected (4) the	Lamp fails to illuminate. Possible death of occupants	The component HORN_RELAY_J4 has failure coil burned out	10	10	3	300

↑ View and edit the resulting report using the FmeaEditor tool.



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