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Ansys
ELITE CHANNEL PARTNER

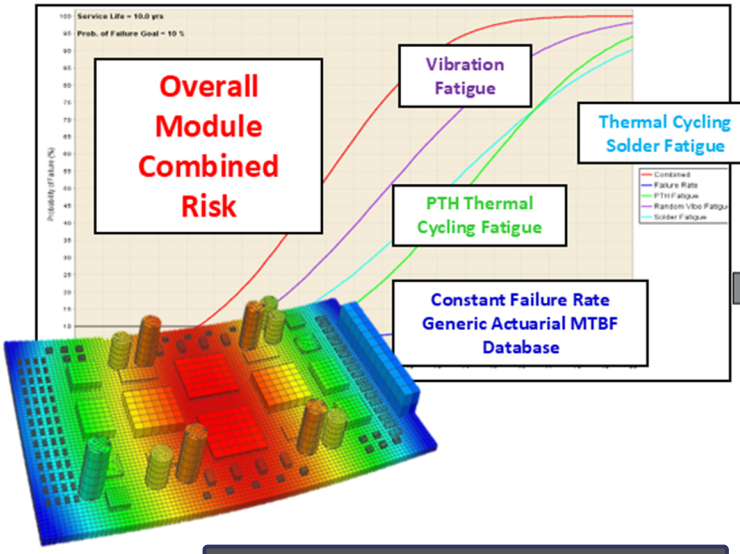
SIMULATION | ELECTRONICS | FLUIDS | STRUCTURES | MISSIONS

For over 25 years, LEAP has assisted thousands of companies from diverse industries to implement technology solutions to digitise their product development processes.

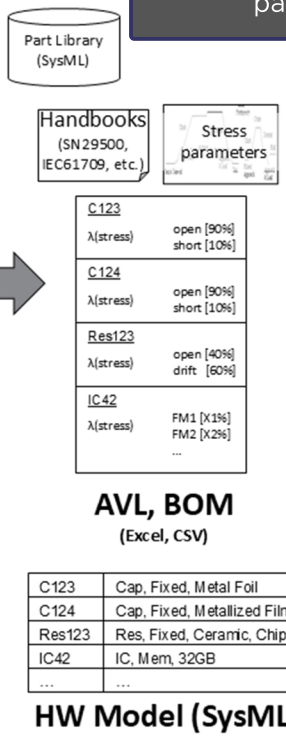
Workflows for Electronics Reliability

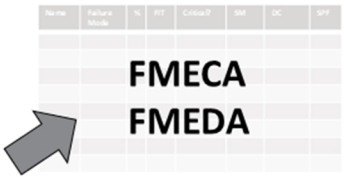
Low rejection ratios and optimised PCB design

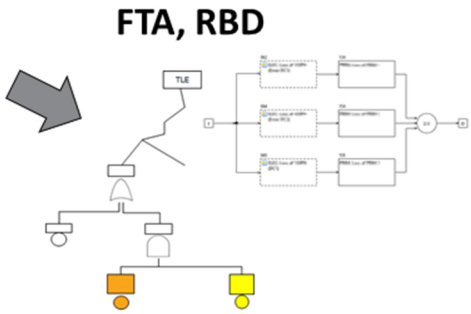
"Providing fast and accurate life predictions at component, board and system levels by accurately modelling silicon–metal layers, semiconductor packaging, PCBs and assemblies."



PCB electronics reliability simulation platform predicts failure risks due to combination of thermal, mechanical and manufacturing stressors.







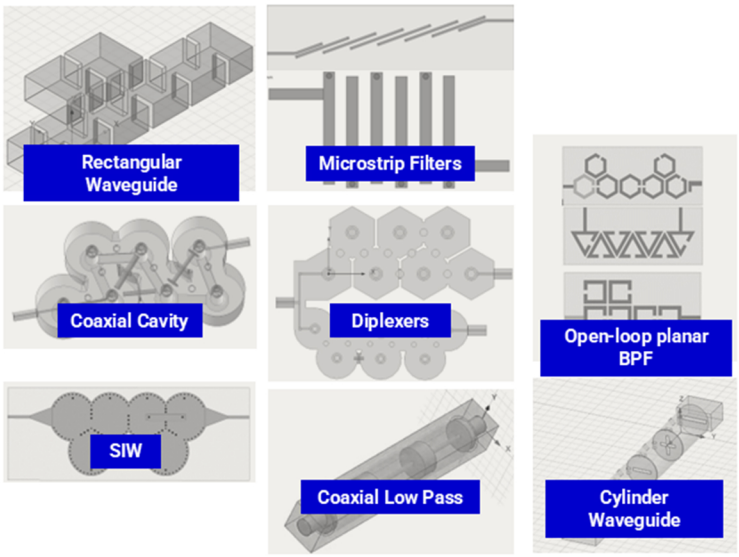
C123	Cap, Fixed, Metal Foil
C124	Cap, Fixed, Metallized Film
Res123	Res, Fixed, Ceramic, Chip
IC42	IC, Mem, 32GB
...	...

HW Model (SysML)

State-of-the-Art Platform for accelerated Filter Synthesis, Simulation and Tuning

Get to market faster using automation and AI-powered workflows

"A complete end-to-end RF filter design and test and measurement platform that features auto-3D modeling, AI-driven optimisation, and fully integrated EM Simulation workflows."



- Comprehensive ***filter synthesis***
- ***Generate*** parameterised 3D geometries automatically
- Powerful optimisation featuring AI, computer-aided tuning (CAT) tools
- Leverage powerful ***EM simulation workflows***
  - Monte Carlo yield analysis, peak power handling and thermal analysis
- Real time frequency and time domain ***filter tuning*** workflow for lab/manufacturing

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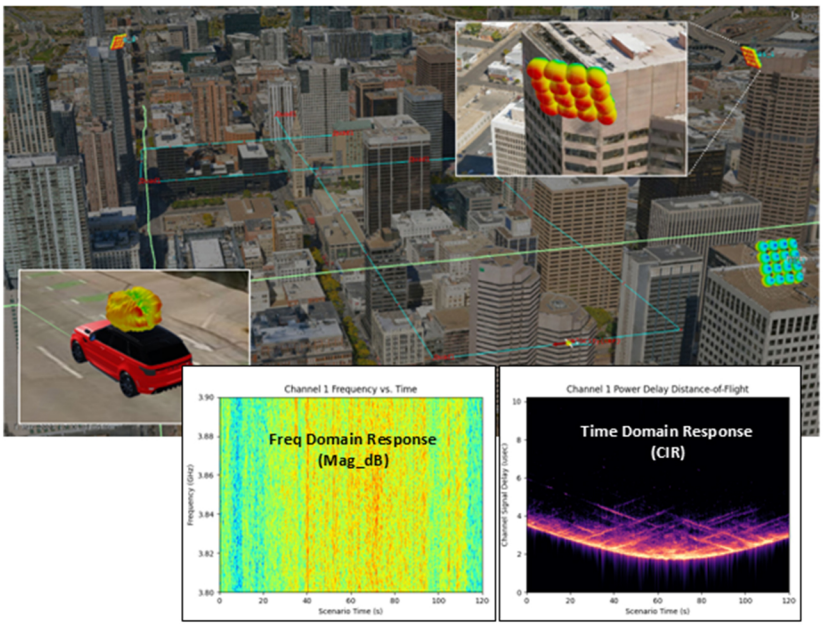
Dynamic Wireless Channel Modeling in Virtual Environments

Test your Antennas in realistic Scenarios for 5G/6G

"Realistically evaluate communication performance in challenging urban environments or across unique mission specific scenarios."



- **Capture** micro/mm RF Channel Models
- **Include** your Antenna and Array Models
- **Generate** wireless models at symbol coherence rates in real time, yielding models appropriate for use in 5G/6G receiver signal processing
- **Test** Access Point Installations
- **Reduce** Costs by performing over-the-air (OTA) testing in an accurate, virtualised environment
- **Mitigate** installation and environment challenges for base station installations through virtualised simulation

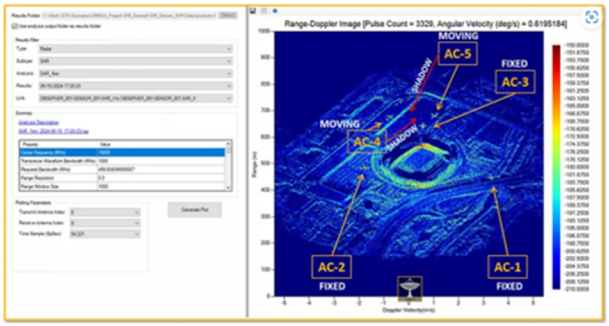
Radar Synthetic Signature Generation

Supporting Advanced Radar Signature Analysis Through Data

"Radar Signature Analysis- understanding how radar signals interact with complex targets to expose the various scattered radar returns. Mapping of radar scattering returns in range and doppler space."

Virtual test environments of existing operational systems and future proposed systems.

Once the algorithm is trained: Software-generated target-embedded SAR data for AI/ML algorithm validation



- **Radar Signatures** incorporating dynamic motions, target surfaces and other in-scene scattering effects
- Easily generate target and condition-specific **synthetic data** to leverage in **AI/ML** studies or testing **target detection and identification** algorithms
- Virtually simulate and test against mission-critical system **performance requirements**