

# IC REVERSE ENGINEERING MADE EASY

A Unique & Patented Method Tailored for Efficiency



User Friendly



Efficient for  
Reliable Results



uC, FPGA, ASIC,  
SoC, SE, ...



## CHIPJUICE

IC REVERSE ENGINEERING SOFTWARE SUITE

Smart

Edition Tools

Fast Processing



With ChipJuice, extracting reliable Netlists  
and Embedded Data have never been that easy



## Texplained

HARDWARE SECURITY INSIGHT

# WHAT IS CHIPJUICE?

With their 20 years of experience in IC Reverse Engineering, security and data extraction, Texplained's experts everyday work consists in analyzing and extracting data from a wide range of ICs.

For making their lives easier, they have developed a software Suite, ChipJuice based on a unique and patented method.

This Software makes it possible to Reverse Engineer and Analyse a wide range of Integrated Circuit, in a easy and reliable manner.

Not only Texplained team itself uses the tool, but this one is also available for customers entrusted to perform IC Reverse Engineering



**CHIPJUICE**  
IC REVERSE ENGINEERING  
SOFTWARE SUITE

**PATENTED**



## FUNCTIONALITIES

Digital circuit Reverse-Engineering & Analysis:  
- Automated netlist and GDSII reconstruction from SEM pictures of the target  
- Advanced tracing capabilities: at physical and logical levels

ROM reading (scripting)

Full GUI for easy navigation

Full python scripting capabilities

Upgrades with new Machine Learning models, new features both for netlist extraction and analysis

Texplained

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[www.texplained.com](http://www.texplained.com)

# FEATURES

Automatically detects tracks, vias, standard cells, power rails

For the interconnection, can extract features from any type of layer:

- Unique: only vias or only tracks
- Mix: tracks + vias (up or down)

Can deal with several different scans per layer for large ICs and / or complex deprocessing situations

Automatically stitches and aligns layers with SEM pic distortion correction or with micro-alignment computation\*

Handles Arbitrary magnification for different layers / scans

Allows manual project modification at every stage of the process



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# CAPABILITIES

Fully re-usable Standard Cell Library reconstruction

• Sharable layers among multi-CJ users

• Full Layer & Full Stack Viewer with integrated correction capabilities

• Features import / export

• Machine learning applied to feature detection

• Usable for any:

- Architecture : Smart Cards, MCUs, ASICs SoCs, etc.
- Any CMOS based architecture
- Type of process: Aluminium and Copper

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# APPLICATIONS

Digital Forensics



Security  
Analyses



Backdoor  
Research



IP Infringement



Obsolescence  
Management

Technology  
Intelligence

Education



## CHIPJUICE

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SOFTWARE SUITE



LEAs

Governments

# USERS



Chip Makers

IC Integrators



Evaluation Labs

Researchers

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