

PDF/SOLUTIONS®
2025 Users Conference

Deep Dive
PDF Solutions
Technical Strategy

Peter Kostka

December 3, 2025



03.

Deep Dive

PDF / SOLUTIONS[®]

SIEMENS

Rishi Bamb

PDF
SOLUTIONS[®]

Scan Fails

Understanding what are Scan Fails

Definition:

Scan fails occur when a chip fails during scan testing, which is used to verify digital logic and detect manufacturing defects.

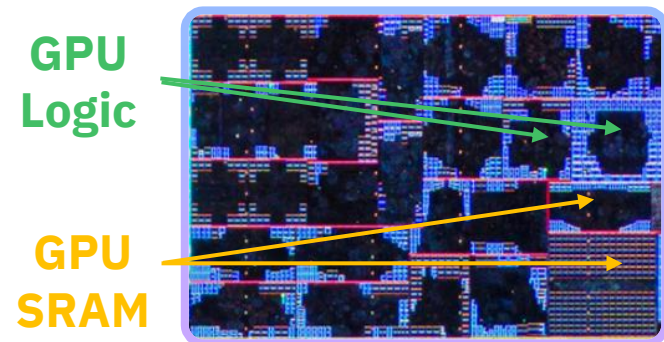
Why they happen?

- Defective logic gates or interconnect
- Timing issues or stuck-at faults

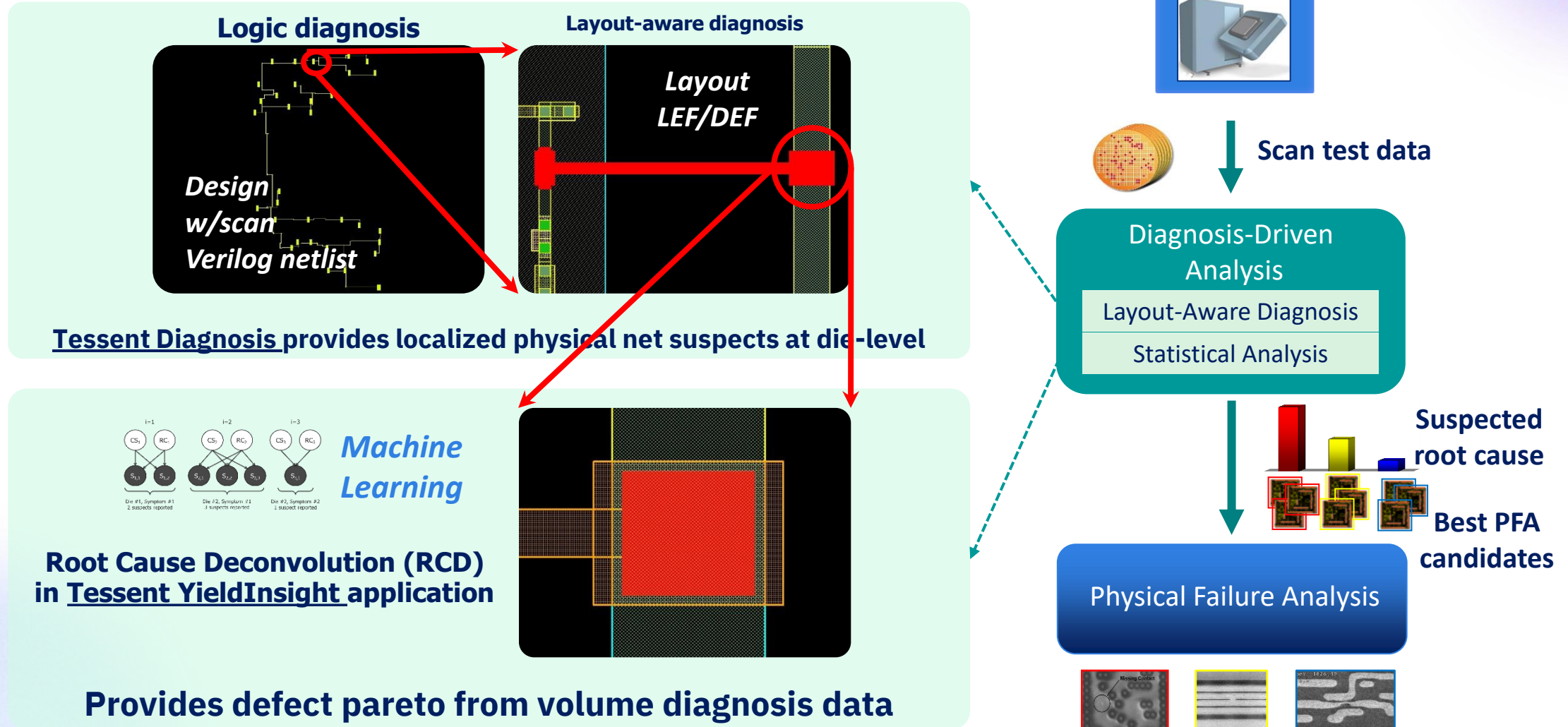
How can they help to improve Yield?

Scan Testing at Wafer Sort

order	bin	passfail	bin_description
1	9	F	Pin Shorts
2	8	F	Pin Opens
3	39	F	jtag
4	17	F	IDDQ
5	11	F	scan_logic
6	5	F	scan_stuck
7	16	F	scan_delay
8	12	F	mbist
9	19	F	DDR
10	25	F	HSIO
11	1	P	functional



Tessent Diagnosis and Tessent YieldInsight



Typical Approach and Challenges

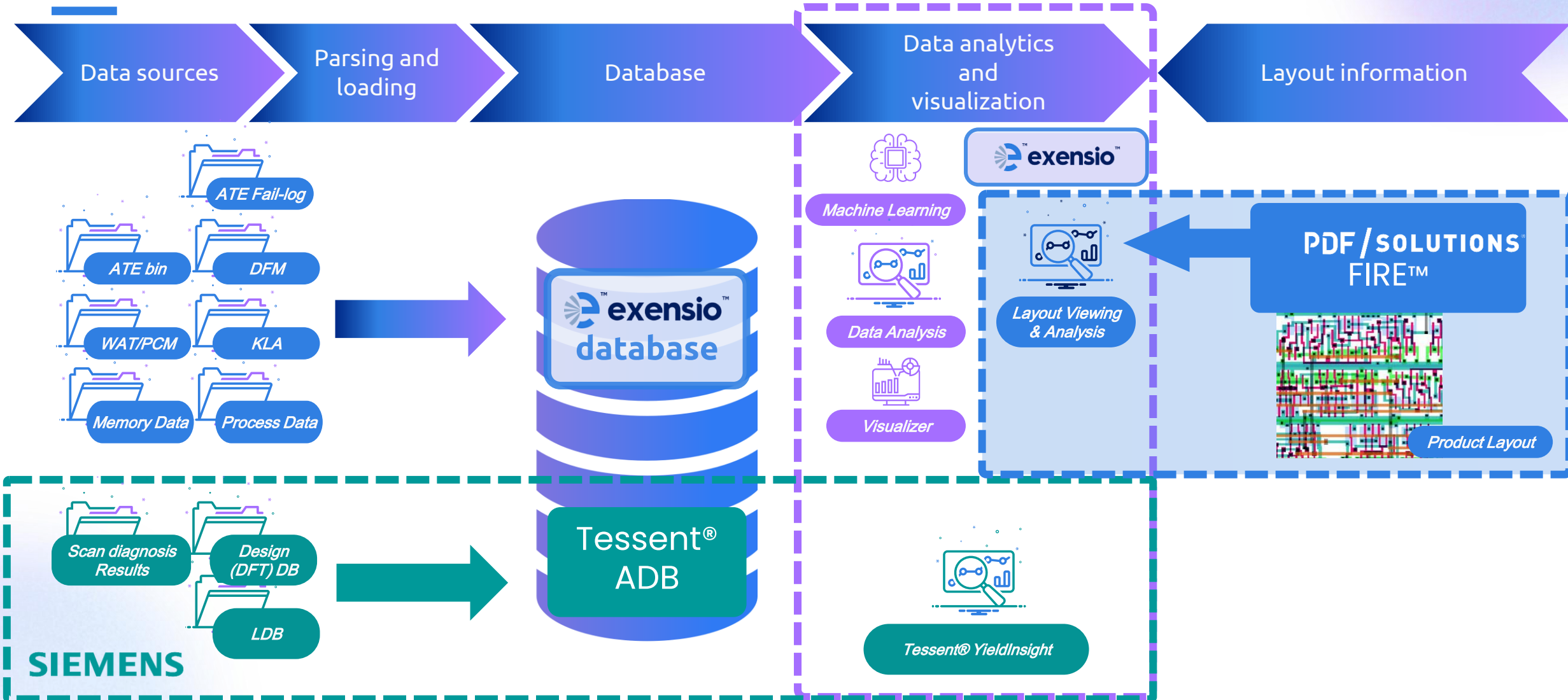


Tessent® YieldInsight

Needs efficient single-UI one-stop solution to product failure analysis including scan test and layout !

Layout Viewer

Exensio MA with Tessent® Scan Diagnosis Data & Layout Review



Why Choose Exensio's Unified Platform?

Tessent Yield Insight + Exensio MA + Layout Review

- Evolve from NPI stage to HVM-ready solution
- Enrich yield analytics with scan diagnosis and layout design information
- Enable Product engineers with fast, secure access to critical layout information
- Enables flexible, scalable hybrid deployment across cloud and on-premises environments

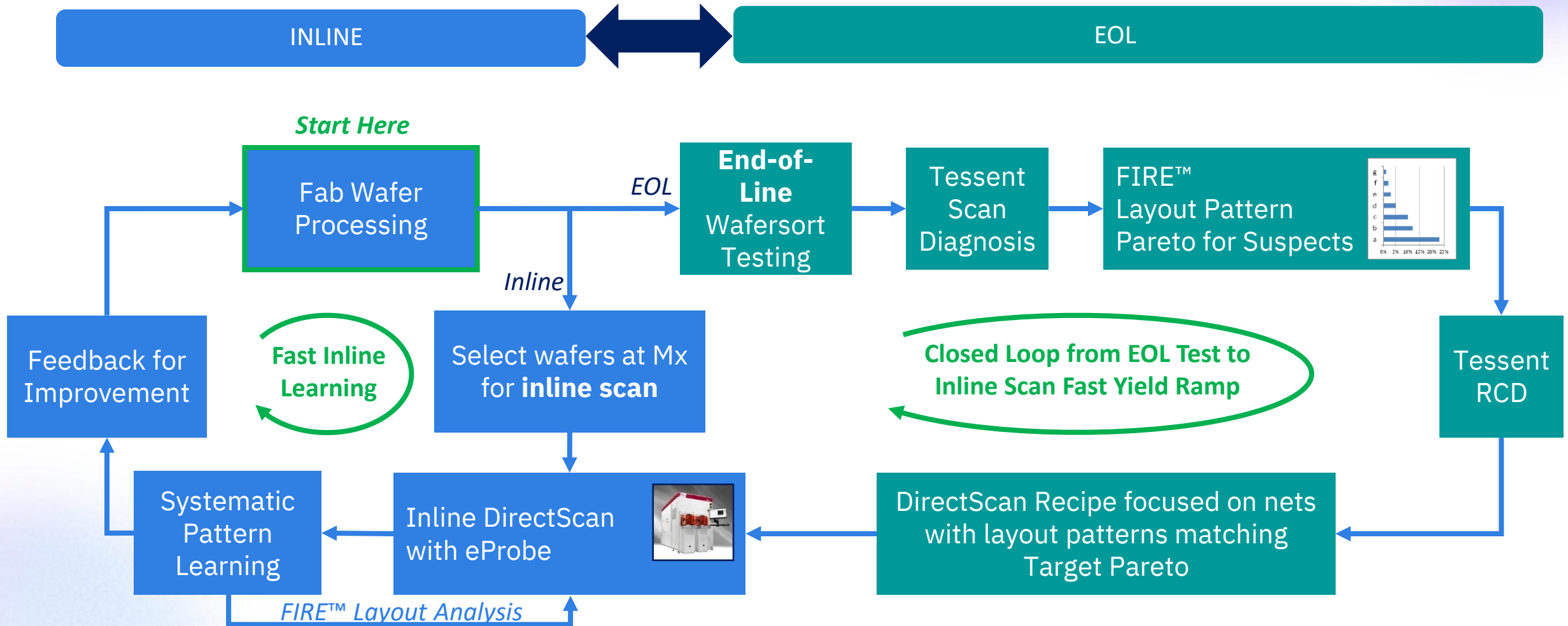
PDF/SOLUTIONS®

PDF/SOLUTIONS® SIEMENS

Demo



Application: Optimized eProbe DirectScan using Tessent® diagnosis results



Key Takeaways

Exensio AIM Scan Analytics with Layout Review

- Transform scan diagnostics from an ***NPI-focused tool*** into an ***HVM-ready solution***
- Increase probability of ***pinpointing*** exact fail location in layout
- Make ***scan diagnosis*** and ***layout information*** accessible to a broader group of engineers
- Opens many opportunities for new applications

Thank You

PDF/SOLUTIONS®

www.pdf.com



INSTAGRAM
@pdfs.Inc



TWITTER
@pdf_solutions



FACEBOOK
pdfsolutionsinc



LINKEDIN
@pdf-solutions



WECHAT
@pdfs_cn



YOUTUBE
@pdf_solutions