# What is new in the Cadence 2026-2027 release?

### AI Optional Package

The AI Optional Package expands the IC package with a collection of AI driven EDA tools aimed at improving design efficiency, accelerating design optimisation, and improving verification throughout the digital IC development process.

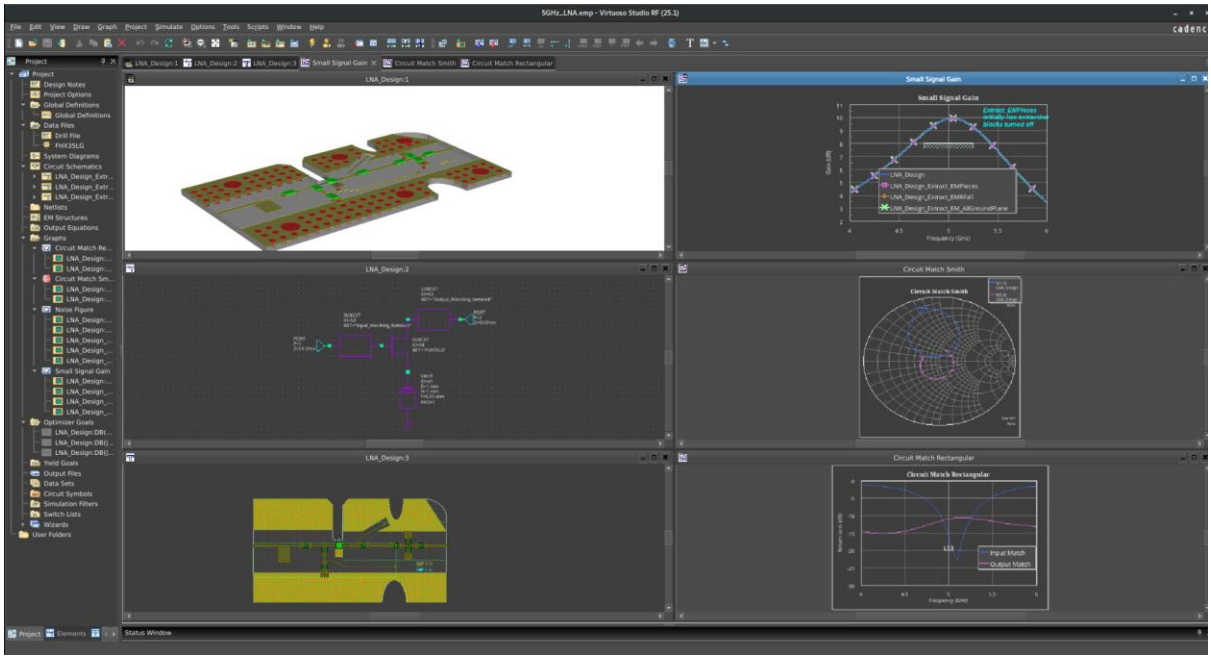
Cerebrus automates the optimisation of digital IC design flows using machine learning. By defining target performance requirements, engineers can allow the tool to explore and refine implementation strategies to meet power, performance, and area (PPA) objectives with less manual intervention.

Conformal AI enhances digital IC verification through its integration with JedAI. It combines advanced analytics with AI/ML-based verification methodologies to help engineers improve verification efficiency and identify potential design issues.

Voltus InsightAI applies artificial intelligence to power integrity analysis, helping engineers investigate IR drop problems, assess their impact, and identify potential corrective actions before they affect the final design.

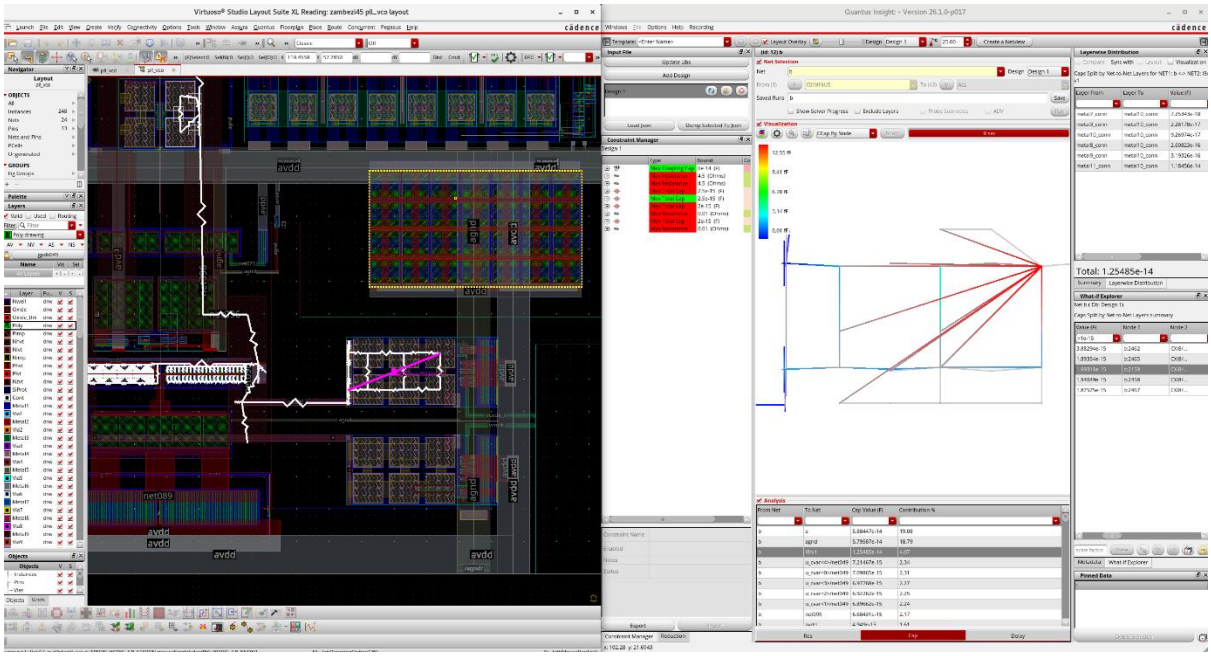
### Virtuoso Studio RF

Virtuoso Studio RF offers a dedicated environment for designing radio-frequency integrated circuits (RFICs) and monolithic microwave integrated circuits (MMICs) using silicon technologies. It retains compatibility with existing Virtuoso OpenAccess-based PDKs while providing specialised capabilities suited to RF design requirements.



### Quantus Insight

Quantus Insight helps engineers investigate parasitic effects in full-custom IC layouts through advanced analysis and debugging capabilities. It supports the identification and diagnosis of layout-related parasitic issues, making it easier to assess their potential impact on circuit behaviour.



### Spectre FMC

Spectre Fast Monte Carlo (FMC) accelerates statistical circuit analysis by using intelligent sampling techniques to identify critical tail behaviour. This approach reduces the number of simulations needed to evaluate statistical extremes, helping engineers obtain useful results more efficiently.

### InspectAR Optional Package

The InspectAR Optional Package adds augmented reality capabilities to PCB inspection and validation workflows. Engineers can view and interact with board-level design information in the physical environment, helping them locate components, investigate faults, and carry out testing and troubleshooting more effectively.

### Joules RTL Studio

Joules RTL Studio provides a dedicated environment for evaluating and improving RTL designs before physical implementation. It helps engineers assess power, performance, and area characteristics, investigate congestion risks, and make informed design decisions earlier in the development cycle.

Other new features include:

- Litmus SVA Generation and Compare
- vManager Gen 4
- Innovus and Genus Incremental Synthesis
- Jasper Low Power and RISC-V Verification
- Liberate Advanced
- Innovus 3D-IC Option
- iPegasus LVS

Other changes to the portfolio to note are the retirement of the SIP Design package, with products moved to the IC and System bundles, and the availability of AWR on Linux.

For full details on the Europractice Cadence portfolio and information on how to order, please see:

https://www.europractice.stfc.ac.uk/tools/cadence.html