

# Unlimited Product Licensing

## Cost-Effectively Eliminate Design Bottlenecks



Dr Ivan Pesic



**SILVACO**



## Traditional Licensing Problems

- Traditional point tool licensing is too expensive and inflexible, offering very low ROI
- Designers have to wait for an available license before they can run the tool
- Additional investment is required to run new tools even if the existing toolset is not fully utilized
- Money remains tied up in idle licenses
- For peak demand, the user is forced to purchase additional expensive licenses
- The user is forced to continuously pay for tools that are infrequently used



## New Licensing Solutions

- Simucad has developed two advanced licensing models that solve the problems with traditional licensing:
  - Token Based Licensing
  - Company Worldwide Unlimited Licensing



## Token Based Licensing

- Token Based Remix enables a team of IC designers to continue checking out any listed Simucad product until all purchased EDA tokens are allocated
- Token Based Remix tokens can be used world-wide by checking them out over your wide area network (WAN)
- Token Based Remix can co-exist with perpetual and term-based licensing
- Token Based Remix supports Linux 32, Linux 64, Solaris and Windows
- Fixed annual fee for each EDA token
- Real time reporting of token utilization
- Peak demand licensing easily accommodated
- Scales investment with design team growth: purchase more tokens when they are needed
- Software maintenance and support included for all products

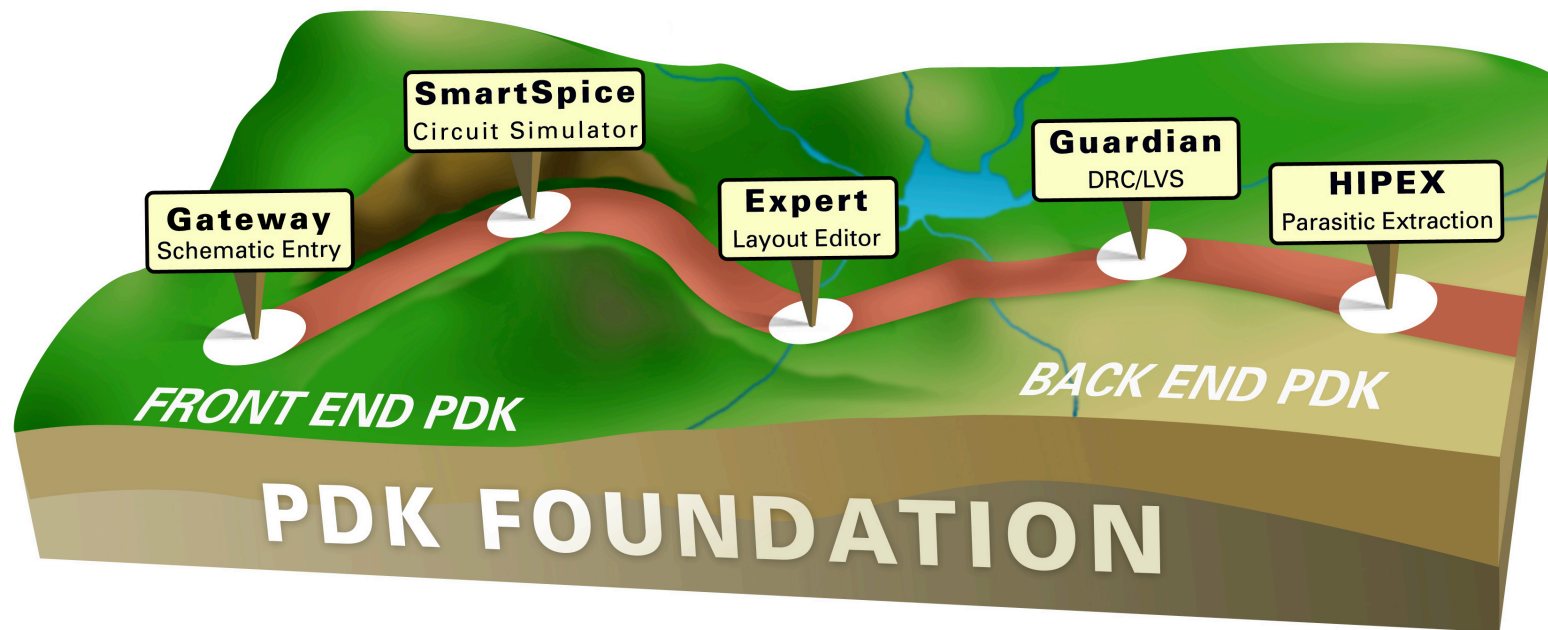


## Predictable Budgeting with Worldwide Unlimited Licensing

- Worldwide Unlimited License for One Fixed Annual Fee
  - An ideal solution to EDA software licensing problems
- Full Control of EDA Software Costs



## PDK Based Analog Design Flow



- Single vendor solution
  - Full EDA software flow
  - PDK supported



## Benefits of Worldwide Unlimited Licensing

- Unlimited tools worldwide
- PDK based design flow
- Free development and maintenance for foundry PDKs
- Single vendor standardization or integration with existing toolsets
- Local unlimited license server at each design center
- Worldwide support and training
- Single vendor full flow solution and PDK availability enables easy migration from one fab to another



## Financial Benefits of Worldwide Unlimited Licensing

- Predictable EDA software budget
- One fixed annual fee
- Annual renewal terms negotiable for one or more years
- Add new designers at no additional software cost
- Maximize existing employee productivity with unlimited licensing
- Minimize circuit design time with unlimited copies of multithreaded tools



## Compatibility with Existing EDA Software Enables Adoption of New Licensing Model

- Straightforward migration from current multi-vendor EDA solutions to Simucad single vendor solution
- Simucad tools maintain compatibility with leading competitors:

### Simucad Product

- **Gateway**

- Schematic Editor

- **SmartSpice**

- Circuit Simulation

- **Expert**

- Layout Editor

- **Guardian  
HIPEX**

- Design Verification  
and RC extraction

### Compatible with

- Analog Artist/Composer

- HSPICE, SPECTRE

- Virtuoso

- Calibre



## Migration Path from Existing EDA Tools to the Simucad Worldwide Unlimited Licensing Solution

- Unlimited Worldwide Licensing can be adopted in stages - especially important for larger companies with large legacy design portfolios. Recommended sequence:
  - Start with front end design flow migration:
    - Step 1 – Adopt SmartSpice
    - Step 2 – Adopt Gateway
  - Continue with back end design flow migration:
    - Step 3 – Adopt Expert
    - Step 4 – Adopt Guardian and HIPEX



## Price/Performance of Tools Licensed with Worldwide Unlimited Licensing

- Worldwide Unlimited Licensing offers a considerably more cost effective solution than the competitors' most aggressive licensing
- Price is negotiated based on company size and number of circuit designers



## Conclusion

- Token-Based and Worldwide Unlimited Licensing, supported by free PDKs, is the future of EDA tool licensing
- These licensing models foster partnerships between the EDA vendor, the design house customer and wafer fabs
- Predictable budgeting allows design houses to freely allocate remaining available funds to expanding design teams, business growth and reducing time to market