

Design it once. Design it right.

We provide a design enablement platform that complements our sophisticated technology and enables a quick and accurate design cycle. We provide design kits, IPs and dedicated design services for our process technologies so our customers succeed with first-time working silicon and fast time-to-market. We have deep partnerships with major EDA vendors and IP providers to supply our customers with the most comprehensive and up-to-date design solutions available in the market.

TowerJazz PDKs offer a front-to-back integrated custom design environment that supports all major EDA vendors' design flows. Our design kits contain the parameters such as layer thickness and stress gradient that have been well defined within the tolerances of our specific manufacturing processes. The kit automatically sets these constraints for the designer allowing only those parameters to be varied during the evaluation of designs and allowing only those designs that are perfectly compatible with the manufacturing process.

Our design enablement platform includes silicon verified and highly scalable device models and robust physical design tools for up front design optimization. Our powerful and efficient tools enable unprecedented accuracy in device models and our unparalleled customer support at every stage of the design flow ensures confidence in designs at near zero risk reducing time to market:

- Unique tools such as **Monte Carlo statistical and PCM based models** allow maximization of the performance-yield tradeoff
- **Jazz Inductor Toolbox (JIT)** provides advanced modeling capability for octagonal and square inductors to provide designers flexibility in choosing the right inductors during design of their products.
- **X-Sigma**: A unique process variation modeling tool that allows to trade off yield vs. performance and efficiently perform design sensitivity analysis
- **MOSVAR** model libraries improve simulation accuracy reducing product development time
- **RMT**: A Reliability Modeling Tool is offered in the Silicon Germanium BiCMOS (SBC) family of technologies, enabling prediction of chip operation as a function of operating conditions and age
- **PADL**: A pre-characterized Power Amplifier Design Library accelerates SiGe PA design to market through off the shelf power cells and PA-centric technology

We have focused our latest design enablement efforts in the emerging power management area as well as the RF/HPA (high performance analog) areas to provide design enablement platforms that complement our advanced technologies.

Process Design Kits Include:

- Symbols and schematics
- Scalable Models with RF accuracy
- Advanced models such as PSP and MOSFETs, HICUM for BJTs, R3 resistors and MOS Model 20 for LDMOS devices
- Scalable layout cells (Pcells) with time saving and features targeted for end applications and tightly coupled to the model
- Monte Carlo Statistical and Mismatch Simulation Capability
- An industry first scalable drift length LDMOS
- Scalable inductors
- Extensive Enhanced Layout Utilities to speed layout cycle time
- Parasitic Extraction and Back-Annotation integrated with model and layout features

Customer support

Our online customer portal is available 24/7. With this portal, you can access File Exchange, which allows you to search, view and download technical documents and design libraries. You may subscribe to specific files or categories and receive automatic notification of document changes.

Logged in, you can also securely transfer forms, design data and other files. In addition, our Design Support Engineers (DSEs) are available to accompany you from the initial phase through the entire design flow up to production ramp, providing unmatched customer service.

Comprehensive Eco System We build more than wafers. We build trust. **TOWERJAZZ**

TowerJazz Partners

IP Partners

To better serve our customers' design needs using advanced CMOS, SiGe and other mixed-signal processes, we have a series of agreements with leading providers of physical design libraries, mixed-signal and non-volatile memory (NVM) design components. These components are basic design building blocks, such as standard cells, interface input-output (I/O) cells, software compilers for the generation of on-chip embedded memory arrays, analog mixed-signal and NVM design blocks.

Design Partners

TowerJazz partners with independent Design houses that have specialized design capabilities to create integrated circuit (IC) designs.

Our design partners can assist in all or part of the design flow. Chipmakers can also augment their own design resources with design capabilities from our partners that are specialized for our manufacturing technologies. We choose design partners for the program based on their ability to provide proven, high quality services and to create designs that comply with our design and verification rules.

Design Star Awards Program

We offer a design center partnership incentive program to independent design centers. The program encourages design centers to refer new customers to TowerJazz, increasing our IP portfolio and number of specialty designs taped into TowerJazz. In turn, they will receive benefits from TowerJazz on products and services ordered either by such design partners or their customers. For more information, visit: www.towerjazz.com/services.html.

EDA Partners

Our design enablement platform utilizes best-in-class and the most updated industry standard tools available for the maximum benefit to our customers. The partnerships we have created enable our customers to leverage innovative products and solutions to conquer design challenges and achieve faster time-to-market with high quality and differentiated products.

In addition, we belong to the IPL Alliance to deliver interoperability of process design kits (iPDKs) for our customers' analog/mixed-signal designs.

TowerJazz has worked with our EDA partners to create design flows for our analog/mixed-signal 180nm power management process. This collaboration provides mutual customers with a complete design and manufacturing solution and the fastest path to silicon realization. TowerJazz's AMS Reference Flow 1.0 includes a comprehensive design flow using a Band Gap Reference circuit that demonstrates a practical and efficient design methodology.

The combination of TowerJazz's advanced technologies with detailed design and layout tools from EDA vendors allows IC designers the ability to quickly and accurately design chips.

TowerJazz Design and IP Partners



www.towerjazz.com/services.html

TowerJazz EDA Partners



For more information please visit www.towerjazz.com.