

### OVERVIEW

The GigOptix Sunset Rescue Program was created to help companies faced with the obsolescence of a standard Integrated Circuit (IC) component from their supplier and desire to replace it with an equivalent custom part. In many cases, GigOptix can develop an equivalent drop-in replacement component. GigOptix will conduct technical feasibility to determine if an ASIC part can be created from the obsolete standards.

### TARGET APPLICATIONS

- Aerospace
- Medical Instruments
- Telecommunications
- Factory Automation
- Military/Defense Systems
- Test & Instrumentation
- Industrial Control

### REPLACEMENT OF OBSOLETE STANDARD COMPONENTS

#### Customer Benefits

GigOptix provides a one-to-one drop-in replacement your obsolete IC with the following advantages:

- Minimal customer involvement in the design phase.
- GigOptix will make every effort to design an equivalent component and will re-spin it up to two times if necessary.
- Low minimal order quantities to support customers' low annual usage

#### Customer Deliverables and Tasks

- Component specifications or datasheet
- All errata available on the component
- Conducting a final test of the ASIC in the system to validate that it works exactly as the original standard component.

#### Optional GigOptix Tasks

In addition to architecting, designing and producing the component, GigOptix can conduct a full PVT characterization of the component. We can also conduct a full qualification of the component, including:

- High Temperature Operating Life (HTOL) test
- Temperature Cycle Test (TCT)
- Highly Accelerated Stress Test (HAST)
- ESD HBM and MM tests
- Latch up test

These tasks are optional as some companies prefer to conduct them internally or bypass them.

#### Target ASIC Solution

GigOptix will target a product from its broad portfolio of legacy Structured ASICs in 0.25 $\mu$ , 0.35 $\mu$  or 0.6 $\mu$  or develop a standard cell ASIC in the proper technology. Regardless of the standard component being obsoleted, GigOptix will offer a matching solution.

## Assurance of Long Product Lifecycle

The 0.25 $\mu$ , 0.35 $\mu$  or 0.6 $\mu$  processes still represent a significant percentage of our foundry partners' revenues. There are no process obsolescence plans expected in the next five years. In the case that a process is obsolete, customers will receive a one year period to place a last time buy and one year thereafter to take possession of the products. GigOptix has relationships with distributors who will be able to stock products for a few additional years if required. Further, GigOptix's philosophy is to avoid imposing product obsolescence on its customers unless a supplier is terminating a specific process or package. In that case, GigOptix will make every effort to offer customers an alternative solution.

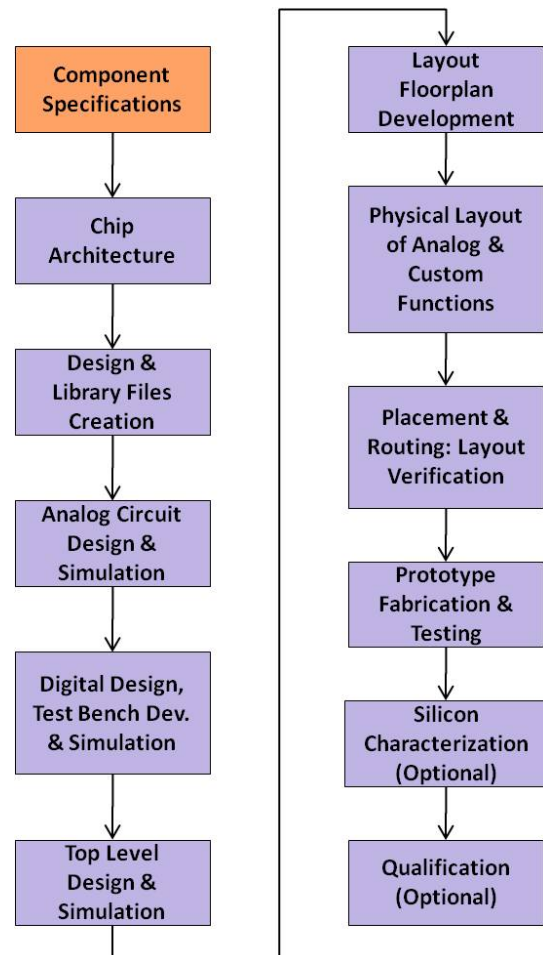
## DESIGN FLOW

The design flow that will be implemented is shown on the right. Successful execution is highly dependent on the completeness and accuracy of the specification provided and the availability of any and all errata on the device.

Upon receipt of a component's specifications, GigOptix will provide an estimated engineering development cost, effort required and budgetary component price. Once the project receives budget approval, we will provide a detailed Statement of Work and a more accurate pricing proposal and schedule. An engineering meeting will follow to explain and discuss the design approach, expectations, risks, schedule and assumptions.

In the case of Analog and Mixed-signal designs, GigOptix has developed a broad portfolio of Analog IP that will be leveraged to speed the development cycle.

GigOptix has developed relationships with trusted IP vendors of standardized digital functions such as processors, interfaces, peripherals, etc. In order to reduce schedule, development cost and project risk, GigOptix will license these IP functions and will integrate them with the rest of the chip. In some cases, external expertise will be leveraged on a contractual basis if this approach is acceptable to the customer and deemed beneficial to the success of the project.



## DESIGN TOOLS

GigOptix uses best-in-class industry standard tools from vendors such as Cadence, Magma, Mentor, Synopsys and Syntest to implement designs. GigOptix has achieved a very high rate of first time success thanks to having a well documented and followed methodology and design flow, many man-years of ASIC design experience and an innate desire for engineering excellence.

