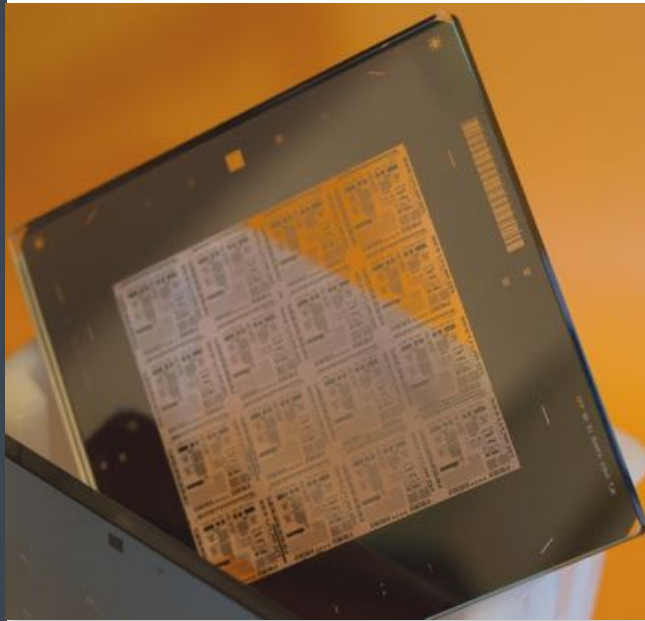


# It's time to rethink...

## ...automated frame generation



- Powerful IA solver
- Process Rule constraint file
- Graphical constraint input
- Support for multi-chip assemblies
- Mask manufacturability verification
- Automatic documentation and database merging
- Reticule optimization
- Essential companion toolbox

XYALIS increases the productivity, reliability, and repeatability of frame generation with GOTframe, an intuitive yet powerful frame placement engine that handles the largest designs with maximum performance and minimum memory requirements.

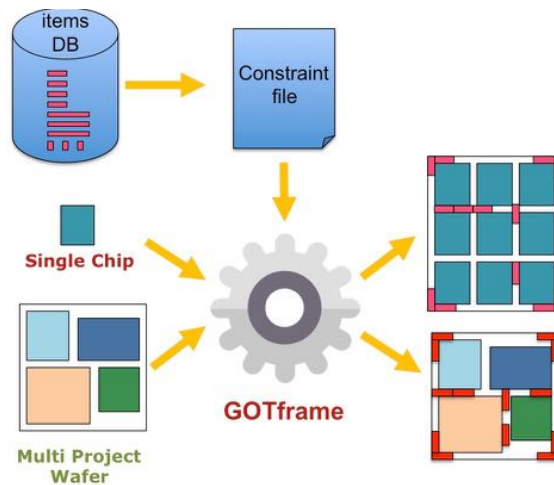
GOTframe automates the insertion of all process and mask specific items: alignment marks, test structures... in the scribe lines. A reusable process-specific file describes all items required by the technology and manufacturing and inspection equipments, along with their placement constraints. The placement engine finds an optimal solution meeting the constraints while minimizing the scribe line width. Dummy fill can be inserted in the scribe lines to increase yield.

By automating a repetitive process, GOTframe increases productivity with a powerful manufacturing object placement engine, enables maximum reuse of item definition and constraints, avoids costly errors due to manual operations, and maximizes silicon by proposing an optimum reticule placement for arrays of chips. GOTframe works for both regular arrays of dies and multi-chip assemblies.



# GOTframe

# Features and Benefits



## ESSENTIAL COMPANION TOOLBOX

XYALIS offers a set of tools dedicated to Mask Data Preparation (multi-chip assembly, mask set creation) and manipulation of large layout databases that can process even the largest GDSII and OASIS® files, with the highest processing speed and the lowest memory requirement, and provide a safe transfer to silicon for the most complex SOC designs.

## SYSTEM REQUIREMENTS

Runs on any Linux workstation with RedHat 6 or above. Management of multi-core is automatic.

A Mac OSX version is also available.

Binaries for other platforms may be provided on request.

## INFORMATION

For more information on products or services please visit

[www.xyalis.com](http://www.xyalis.com)

or e-mail [sales@xyalis.com](mailto:sales@xyalis.com)

- **Driven by process-specific frame description file**  
A frame description file describes the process-specific items and their associated constraints: location, transformation, placement order, and advanced conditional constraints. It handles any type of frames and can be parameterized for reusability between projects. Protect layers are automatically generated.
- **Reticule optimization**  
GOTframe selects the optimum chip rotation in order to increase the number of dies in the frame. If mandatory items cannot be placed in the initial reticule, GOTframe computes the minimum scribe line expansion necessary to place all items.

- **Graphical constraint input**

The frame description file is an intuitive, human readable description of the process-specific constraints. It is easily created and updated with any text editor or through a set of forms provided by a dedicated graphical user interface which speeds up ramp-up time.

- **Support for multi-chip assemblies**

GOTframe inserts process-specific items in the scribe lines of regular arrays of dies. It is also designed to insert process-specific items around and in between the chips of a multi-chip assembly created with XYALIS GOTmuch.

- **Mask manufacturability verification**

A design database analyzer combined with an assembly rule checker warrants that the generated frame is free from error. Special checks are carried out to ensure that the final mask set database can be handled with no problem by any mask shop and manufacturing processing and inspection tool.

- **Automatic documentation and database merging**

User documentation is generated by the click of a button. Format can be customized through a plug-in mechanism. Final layout data is generated as a single or multiple files to offer the best trade-off between job deck complexity and file size.



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