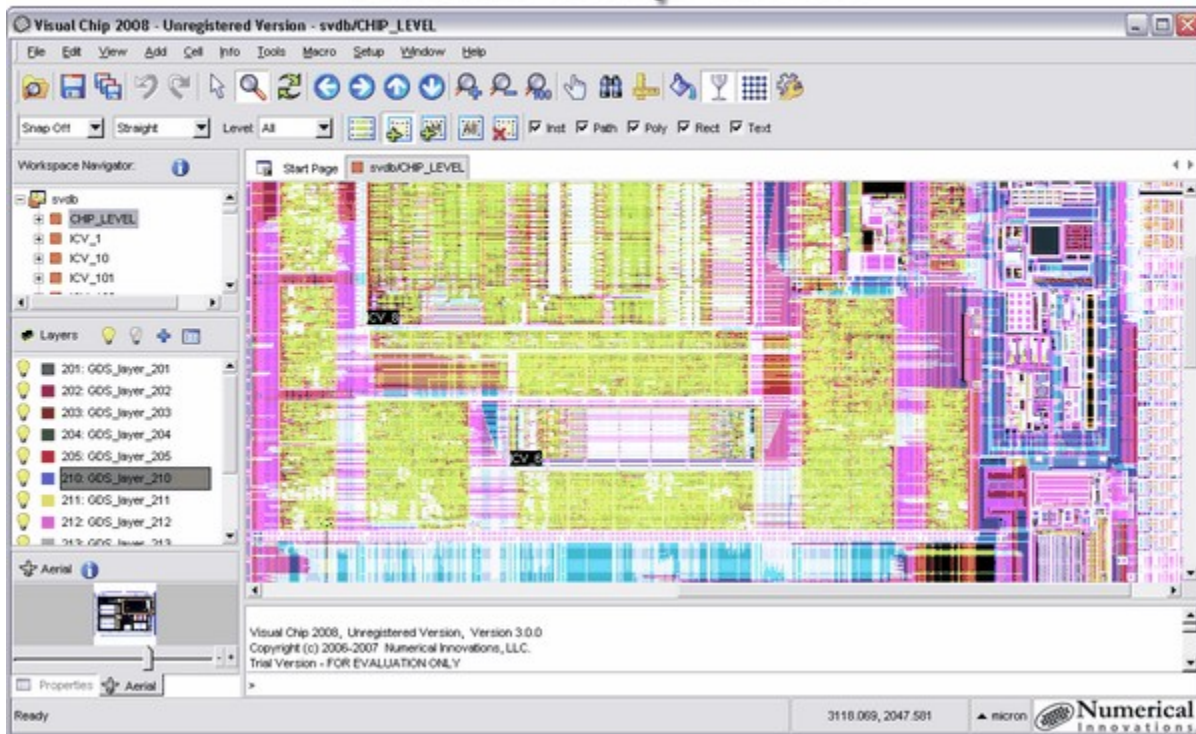


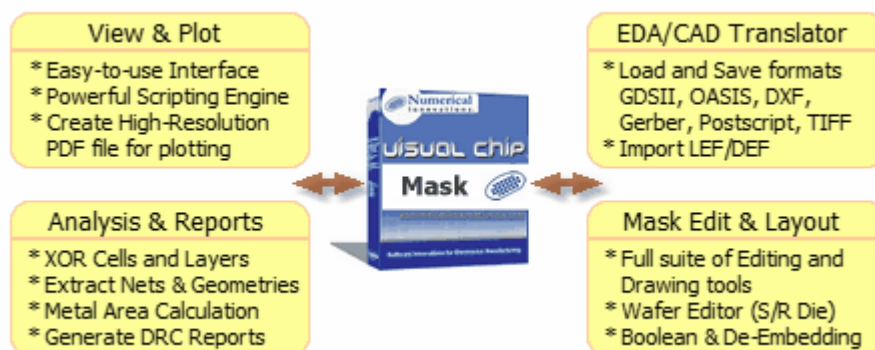
# Visual Chip 3000



## Visual Chip 3000: The Fast and Versatile GDSII Solution

Visual Chip is a fast and versatile layout visualization tool supporting formats GDSII, OASIS, and more. It can easily be incorporated into a wide range of flows including design, verification, mask data preparation, inspection and failure analysis. Since Visual Chip allows editing, users can check and fix identified errors in the same environment or use it as a layout tool for IC and MEMS designs with complex geometries. Visual Chip gives you all of the high-end features found in other "layout visualization tools", for a fraction of the cost.

Visual Chip 3000: One Tool... so many Solutions:



## **Cool Benefits when using Visual Chip 3000:**

### **Benefit 1: A Complete GDSII Solution**

Visual Chip is a multi-purpose GDSII Editing, Analysis, and Conversion system that provides everything you need in one product to get from Design to Mask. Purchasing individual GDSII viewers, editors, translators & analysis tools from one or more vendors, introduces the potential for additional interoperability issues between those tools, increases the overall expense, plus it takes longer to learn how to use each tool respectively.

### **Benefit 2: Use As a Multi-Format Translator (even when you don't need to edit files)**

Who says Visual Chip is just a mask editor... Translate between all common EDA and CAD formats using Visual Chip. Simply import the GDSII (or other file format) and then export to your required file format. Why pay thousands extra for GDS-II, OASIS, Gerber, Postscript, and DXF translators when Visual Chip 2008 can do it all. Talk about value...

### **Benefit 3: Save Money on Photomask Tooling Costs**

Depending on your requirements, low cost photomasks can be generated from Visual Chip by simply outputting 10X Gerber or Postscript files. These files are plotted for about \$20 per film, and after using a 10X stepper process, masks with 1-2 um features can be accurately created. This is an excellent technique for quick masks, or designs with large geometries; No further data manipulation or fracturing is needed!

### **Benefit 4: GDSII Plotting made Simple**

The High-Resolution PDF Plot Tool incorporates our technologically advanced "Smart-Raster" and "Smart-Detail" algorithms, calculates resolutions up to 2400 DPI, supports various hatch fill patterns, plot area can be extents or active display, and includes additional plot header, layer legend, & rulers for reference. Visual Chip's High-Resolution PDF Plot Tool is compatible with all major plotters & printers from HP, Lexmark, Epson, and Xerox.

Why use any other plot solution, printer driver, or RIP software that is more expensive and difficult to configure. Our High-Resolution PDF Plot Tool is cost-effective, easy-to-use, fast, and compatible with any plotter or printer device! With Visual Chip's PDF Plot Tool, you can easily share & review plots in electronic format, plot in-house, or send the optimized PDF's to any printing service and have them output a hard copy.

### **Benefit 5: Supports Non-Standard Geometries**

Visual Chip supports electronic designs containing geometries that have not traditionally been the focus of today's main-stream layout tools; such as arcs, curves, circles and other multi-polygonal shapes which are commonly found in layouts for MEMs, RF/Microwave, and optical components.



### **Benefit 6: Cache Huge GDSII Files - Never Wait Again**

Have you ever loaded a huge GDSII file only to find out later that you needed to reload it? Maybe a day has passed by and you have to view that same GDSII again. With Visual Chip there's no need to reload that huge GDSII, because Visual Chip let's you "Cache" the workspace. Simply check the "Cache Workspace" option in the File menu (before exiting), and you can instantly go right back to your GDSII.

### **Benefit 7: Runs on Windows and Linux 32-bit and 64-bit.**

Visual Chip is built to run across multiple platforms including Linux and Windows, plus it natively supports both 32-bit and 64-bit architectures. Got the need for speed, or a need to view large files over 2GB? The 64-bit Linux and Windows versions provide exceptional speed & performance.

## Visual Chip 3000: Features Comparison

		
	<b>Mask</b>	<b>Inspector</b>
<b>Translator Features</b>		
<b>General</b>		
"Cache" data to drastically reduce access time when re-opening large GDSII files.	Yes	Yes
Operates easily and simply, like a browser.	Yes	Yes
Load Multiple GDSII files in one session.	Yes	Yes
Create high-resolution Adobe® PDF files (up to 'E' Size) for Plotting or Sharing.	Yes	Yes
Physical XOR Cells (Save results to GDSII)	Yes	
Graphical Comparison (quickly find any differences between cells)	Yes	Yes
Set Background Image to compare microscope photos, against real data.	Yes	Yes
Area Calculator (Useful for calculating metal area and density in problem spots)	Yes	Yes
Verification Tools: (Angle, Grid, and Polygon)	Yes	Yes
Query: All object properties.	Yes	Yes
Measure: Point to Point, Object to Object	Yes	Yes
Find: Net, Pin, Property, Instance, DataType, Composite Level	Yes	Yes
Add Ruler / Remove Rulers	Yes	Yes
Cell Transformation (Flatten, Change Origin, Rotate, Mirror) save results as GDSII	Yes	
Add Red-Line Markup Objects: Lines, Arcs, Rectangle, Ellipse, Arrow, and more.	Yes	Yes
Floating/Network Licenses available using FLEXIm technology.	Yes	Yes
<b>Import</b>		
GDSII	Yes	Yes
OASIS (New Stream Format)	Yes	Yes
DXF / DWG	Yes	
Gerber (274X & Fire9000)	Yes	Yes
Image (TIFF, JPEG, BMP)	Yes	Yes
Large Bitmap (Import huge bitmaps of any size)	[1]	
Postscript and PDF	Yes	
Compressed File (Zip, Tar, GZ, etc)	Yes	Yes

3D Formats (STL, IGES, & Rhino3DM)	[2]	
<b>Export</b>		
GDSII	Yes	
OASIS (New Stream Format)	Yes	
DXF (all AutoCAD versions)	Yes	
Gerber (274X & Fire9000)	Yes	
Screen Capture (TIFF, BMP, JPEG, PNG, GIF)	Yes	Yes
Postscript	Yes	
PDF	Yes	Yes
Large Bitmap (Export huge bitmaps of any size)	[1]	
3D Formats (STL, IGES, & Rhino3DM)	[2]	
<b>Editing</b>		
Edit (Move, Copy, Rotate, Flip, Scale, Explode, Array, Attributes, and more).	Yes	
Add (Instance, Polygon, Line, Wide Path, Rectangle, Circle, Text, Multi-Line Text)	Yes	
2D Boolean Operations (OR, AND, XOR, Subtract, Invert, Sequential)	Yes	
Polygon De-Embedding (Solves the polygon-Inside-of-polygon problem)	Yes	
Cut Out (Crop an area of a cell for separate analysis) save results as GDSII	Yes	
Composite Layer Editing	Yes	
Tile Extraction (splits cell into individual sections) excellent for analysis.	Yes	
<b>Editing</b>		
Edit (Move, Copy, Rotate, Flip, Scale, Explode, Array, Attributes, Stretch, and more).	Yes	
Layers (Alignment, Merge, Delete, Add, and more).	Yes	
Layer Scale X/Y (Scale layers using separate X and Y values)	Yes	
Add (Flash, Trace, Polygon, Wide Path, Rectangle, Arc, Circle, Text, Multi-Line Text, Drill Hit)	Yes	
Layer Scale X/Y (Scale layers using separate X and Y values)	Yes	
Cell (Insert Cell, New Cell, Delete Cell, Push-Pop Cell, Open Selected Cell, Cell Information)	Yes	
<b>C/C++ Macro Script Engine</b>		
Create, Load, and Run C++ Scripts & Binary Applications	Yes	
Debug Scripts	Yes	
Built-In Script Editor (Edit & run scripts while inside VC 3000)	Yes	
<b>Misc.</b>		
Compatibility with AutoCAD ARX Tools: EasyGDSII	Yes	Yes
Compatibility with AutoCAD ARX Tools: EasyOasis	Yes	

Visual Chip 3000 Add-On Modules			
[1]	<b>Large Bitmap</b>	Import and Export large bitmaps (unlimited pixels) to an external file system.	\$500
[2]	<b>3D Interface</b>	Import and Export 3D-Formats: STL, Rhino 3DM, IGES (Export).	\$500

## Visual Chip 3000: Here's what they say...

*"I just wanted to drop you a note and let you know that your program - visual chip - is being utilized here with no issues. We have used the enterprise method of installation and have found that with just minimal training, everyone can use it and has only a small learning curve. Thanks for the good work and support."* - **Lilliputian Systems**

*"This truly is the 'Next Generation' of IC plotting. My GDSII files are typically 1GB in size, and I was easily able to create 'E' Size PDF files that were under 25MBs! These outputted PDF files are so small and compact, I can view & plot them to our HP Design jet from Adobe Acrobat without any hassle. I now keep an archive of all my GDSII designs in PDF format for easy reference".* - **Motorola**

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