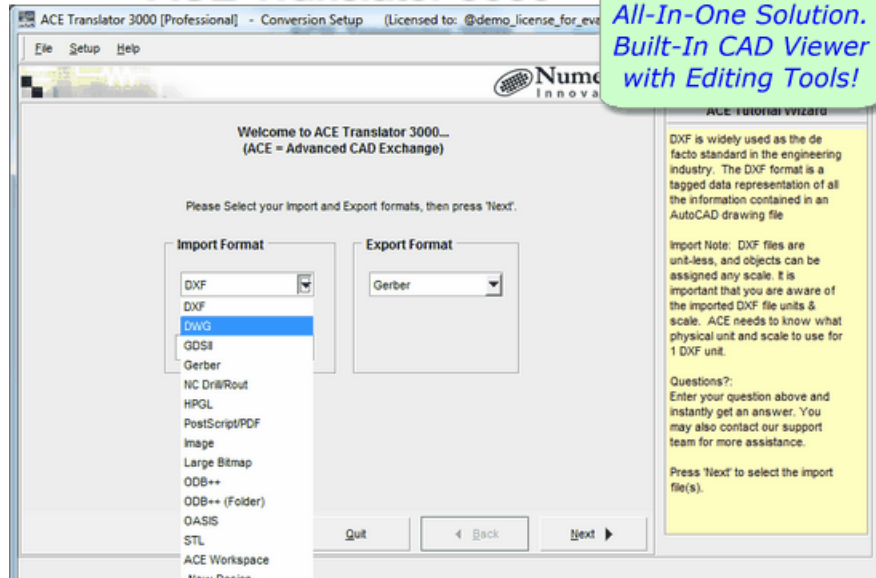


ACE Translator 3000



Revolutionizing the CAD Translator market with Over 100 Translators in one Tool

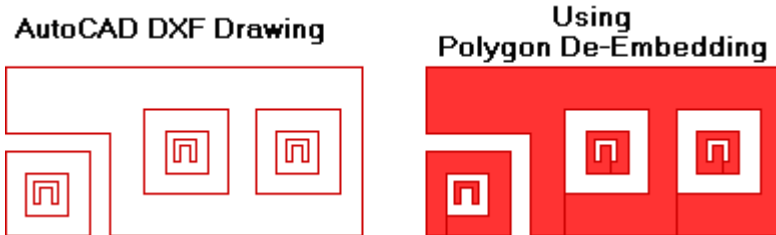
ACE Translator 3000 provides over 100 translators between most common EDA, CAD, and 3D formats - all in a single intuitive environment. ACE simplifies the translation process, and the built-in viewer is user-friendly with powerful editing & repair features. ACE Translator 3000 will successfully fit into your daily workflow and files outputted from ACE are optimized to be compatible with all design systems.

How ACE Translator 3000 works:



Editing & Repair Features

Editing & clean up of geometries can be the most time consuming, and error prone process when translating CAD files. These CAD geometries can be complex to visualize because most are drawn with 'zero width' lines; and self-intersection, redundancy, and open polygons are permitted. ACE was specifically developed for these situations, and it includes many customized editing & repair features to professionally handle any geometrical situation, such as: Polygon De-Embedding which automatically solves the polygon-inside-of-polygon problem; Open and overlapping polygons are instantly fixed and closed; Boolean operations to easily create new shapes from arbitrary polygons, and more. ACE provides WYSIWYG editing – all editing & drawing features are done at the mask level; so you know exactly what you're getting, and there is no need to worry about re-translating again!



ACE 3000 Professional - An Excellent Return on Investment (ROI)

Over the course of several years, your company will probably acquire many different tools to support your primary design software. Purchasing individual translators & tools from one or more vendors, introduces the potential for additional interoperability issues between those tools, it takes longer to learn how to use each tool respectively, and the overall expense & maintenance contracts for all these tools combined can cost you thousands of dollars! ACE Translator 3000 is a multi-purpose Conversion, Editing, and Viewing system that provides everything you need in one product.

Translators	Editor & Tools
DXF2GDSII	GDSII Editor
DXF2Gerber	Gerber Editor
GDSII2DXF	Boolean Engine
Gerber2DXF	Custom Editing Tools.
Gerber2GDSII	Polygon De-embedding, Join, etc.
GDSII2Gerber	

Cost Over \$15,000(US)!*

*These individual products were priced at a competitive company in July 2005

The image shows the ACE3000 software box. The box is blue and white. At the top, it says 'Numerical Innovations'. Below that, in large letters, is 'ACE3000'. There are images of circuit boards on the box. At the bottom, it says 'The Ultimate Link from Design to Fab' and 'numericalinnovations.com'.

Benefits when using ACE Translator 3000:

Benefit 1: Converts all common EDA & CAD formats in one tool.

You can output your design files to all common EDA and CAD formats (DXF, DWG, Gerber, GDS-II, ODB++, OASIS, IGES, STL, PDF, Postscript, Tiff, Bmp, Png, etc.), and since ACE gives you over 24 translation solutions one product, you're always prepared to handle any file translation.

I only convert between two formats. Why do I need all those remaining EDA and CAD formats in ACE Professional?

Two words: Flexibility & Preparation. *There's always going to be that one day when you're given some dxf, dwg, odb++, stl, gdsii, oasis, gerber, or other file that is not commonly part of your daily workflow. Don't get stuck turning away customers/colleagues or having to frantically searching the internet to purchase another translator when ACE has everything you need in one product. In addition, ACE Translator 3000 - Professional costs less than most commercial CAD translators that only convert between two formats.*

Benefit 2: Easily Convert any file in 4-Steps

ACE handles all the complex, technical aspects of the translation process for you. Most of the options are already pre-set, and after a few clicks your files have been translated. Instead of wasting countless hours of "exhausting trial & error" you can focus all your energy on actually using your translated files, so that all your working time is productive time.

Benefit 3: Use As a Multi-Format Viewer (even when you don't need to convert files)

Who says ACE is just for translating files... View, and print all common EDA and CAD formats in a single, unified viewer even when you don't need to convert files. Simply set the export option to "Viewer Only". Why pay thousands extra for Gerber, GDS-II, ODB++, and DXF Viewers when ACE can do it all. Talk about value...

Benefit 4: Edit Data before Outputting

Make changes before outputting your files. Maybe you'd like to add your company logo, clean-up excess data, or perform step & repeats; you've got the power to change.

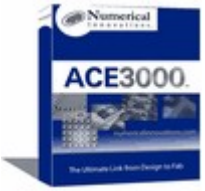
Benefit 5: Save Your Translation and Reuse it later

Have you ever performed a translation only to find out you needed to make a few minor changes? Maybe you needed to output different layers or make some edits. With ACE there's no need to start over, because ACE let's you save the workspace to a file (*.wrk); so you can go right back to your existing translation.

Benefit 6: Runs on Windows and Linux 32-bit and 64-bit.

ACE Translator 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 convert large files over 2GB? The 64-bit Linux and Windows versions provide exceptional speed & performance.

ACE 3000: Features Comparison

	
Translator Features	
General	
Easy-To-Use. Learn in minutes!	Yes
Accurate to 1/10 of a Nanometer	Yes
Runs on Windows XP and Vista	Yes
Runs on Linux 32-bit and 64-bit	Yes
Used by many Fortune 500 companies worldwide including Microsoft, SONY, NASA, etc.	Yes
Floating/Network Licenses available using FLEXlm technology	Yes
Import	
DXF / DWG	Yes
Gerber (RS-274D, RS-274X, Fire9000)	Yes
GDS-II	Yes
NC Drill/Mill Data	Yes
HPGL	Yes
Image (TIFF, BMP, JPEG, PNG, GIF)	Yes
Postscript and PDF	Yes
Aperture Converter (Loads any Aperture File) - for Gerber RS-274D Importing	Yes
3D Formats: STL	Yes
ODB++	Yes
OASIS (New Stream Format)	Yes
Large Bitmap (Import huge bitmaps of any size)	Yes
ACE Workspace	Yes
New Design (Start from scratch)	Yes
Export	
DXF / DWG	Yes
Gerber (RS-274X)	Yes

GDS-II	Yes
NC Drill	Yes
Screen Capture (TIFF, BMP, JPEG, PNG, GIF)	Yes
Postscript / PDF	Yes
3D Formats: IGES / STL	Yes
ODB++	Yes
OASIS (New Stream Format)	Yes
Large Bitmap (Export huge bitmaps of any size)	Yes
Built-In Viewer	
Complete Viewing capabilities (Unlimited Zoom, Pan, Scrolling, etc.)	Yes
Positive / Negative Data Handling	Yes
Layer Information / Properties	Yes
Query: All object properties (Dcode, Layer, and more)	Yes
Measure: Point to Point, Object to Object, Net to Net	Yes
Find: Dcode, Net, Pin, Property, Job Insert, Composite Level	Yes
Add Ruler / Remove Rulers	Yes
Aperture and Drill Table	Yes
Graphical Comparison between Layers	Yes
Graphical Comparison between Cells	Yes
Find All Open Boundaries	Yes
Editing	
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
Tools	
Merge Overlapping Objects	Yes
De-Embed Objects (Solves the object-Inside-of-object problem)	Yes
Flatten Composite	Yes
Flatten Hierarchy	Yes
2D Boolean Operations (OR, AND, XOR, Subtract, Invert, Sequential)	Yes
Composite Tools (Build Composite Layer, Separate Composite, Edit Composite)	Yes
Clip Area Wizard (Cut out a specific area of a design for separate analysis, etc.)	Yes

Remove Tiny Segments	Yes
Chop Polygons	Yes
Composite Layer Editing	Yes
Fix Invalid Polygons	Yes
Convert to Rectangle	Yes
Convert to Circle	Yes
Join Wizard (Connect Adjacent Lines/Arcs)	Yes
DXF Translators	
1: DXF to Gerber	Yes
2: DXF to GDSII	Yes
3: DXF to ODB++	Yes
4: DXF to OASIS	Yes
5: DXF to STL	Yes
6: DXF to IGES	Yes
7: DXF to Large Bitmap (Any Resolution)	Yes
8: DXF to Image (GIF, TIFF, JPEG, etc.)	Yes
9: DXF to DWG	Yes
10: DXF to Postscript	Yes
11: DXF to PDF	Yes
Gerber Translators	
12: Gerber to DXF	Yes
13: Gerber to DWG	Yes
14: Gerber to GDSII	Yes
15: Gerber to ODB++	Yes
16: Gerber to OASIS	Yes
17: Gerber to STL	Yes
18: Gerber to IGES	Yes
19: Gerber to Large Bitmap (Any resolution)	Yes
20: Gerber to Image (GIF, TIFF, JPEG, etc.)	Yes
21: Gerber to Postscript	Yes
22: Gerber to PDF	Yes
GDSII Translators	
23: GDSII to DXF	Yes
24: GDSII to Gerber	Yes
25: GDSII to OASIS	Yes

26: GDSII to ODB++	Yes
27: GDSII to STL	Yes
28: GDSII to IGES	Yes
29: GDSII to DWG	Yes
30: GDSII to Large Bitmap (Any resolution)	Yes
31: GDSII to Image (GIF, TIFF, JPEG, etc.)	Yes
32: GDSII to Postscript	Yes
33: GDSII to PDF	Yes
OASIS Translators	
34: OASIS to GDSII	Yes
35: OASIS to DXF	Yes
36: OASIS to DWG	Yes
37: OASIS to Gerber	Yes
38: OASIS to ODB++	Yes
39: OASIS to STL	Yes
40: OASIS to Large Bitmap (Any resolution)	Yes
41: OASIS to Image (GIF, TIFF, JPEG)	Yes
42: OASIS to Postscript	Yes
43: OASIS to PDF	Yes
DWG Translators	
44: DWG to Gerber	Yes
45: DWG to GDSII	Yes
46: DWG to ODB++	Yes
47: DWG to OASIS	Yes
48: DWG to STL	Yes
49: DWG to IGES	Yes
50: DWG to Large Bitmap (Any resolution)	Yes
51: DWG to Image (GIF, TIFF, JPEG, etc.)	Yes
52: DWG to DXF	Yes
53: DWG to Postscript	Yes
54: DWG to PDF	Yes
ODB++ Translators	
55: ODB++ to Gerber	Yes
56: ODB++ to DXF	Yes
57: ODB++ to DWG	Yes

58: ODB++ to GDSII	Yes
59: ODB++ to OASIS	Yes
60: ODB++ to STL	Yes
61: ODB++ to IGES	Yes
62: ODB++ to Large Bitmap (Any resolution)	Yes
63: ODB++ to Image	Yes
64: ODB++ to Postscript	Yes
65: ODB++ to PDF	Yes
STL Translators	
66: STL to Gerber	Yes
67: STL to DXF	Yes
68: STL to DWG	Yes
69: STL to GDSII	Yes
70: STL to OASIS	Yes
71: STL to ODB++	Yes
72: STL to IGES	Yes
73: STL to Large Bitmap (Any resolution)	Yes
74: STL to Image	Yes
75: STL to Postscript	Yes
76: STL to PDF	Yes
Postscript/PDF Translators	
77: Postscript to STL	Yes
78: Postscript to Gerber	Yes
79: Postscript to DXF	Yes
80: Postscript to DWG	Yes
81: Postscript to GDSII	Yes
82: Postscript to OASIS	Yes
83: Postscript to ODB++	Yes
84: Postscript to IGES	Yes
85: Postscript to Large Bitmap (Any resolution)	Yes
86: Postscript to Image (GIF, TIFF, JPEG, etc.)	Yes
87: Postscript to PDF	Yes
Large Bitmap Translators	
88: Large Bitmap to STL	Yes
89: Large Bitmap to Gerber	Yes

Companies who have recently purchased ACE Translator:

Microsoft Corporation	Alcatel-Lucent
Philips Applied Technologies	Dalsa Inc.
United States Navy	Hughes
Jet Propulsion Laboratory (JPL)	General Electric (GE)
ARC Wireless Solutions	Hitachi
Altera	QSecure, Inc
SONY	Agilent
Advanced Monolythic Ceramics	3M

and many others...

ACE Translator 3000: Here's what they say...

"The ACE translator product has been a valuable and cost effective solution. We have not had any problems to this point, and the results have been excellent! The support team has been very responsive." - **Texas Instruments**

"We use several of your translators all the time. They are really easy to use and fast." - **JPL-NASA**

"ACE Translator did the job. We'll be in touch soon." - **Mercury Marine**

"I used the ACE Translator to convert gdsii files into the dxf format (regarding a mask for semiconductor devices). My impression was that it is easy to use and if somebody would need a program for converting, I would recommend the ACE Translator" - **Walter Schottky Institute**

"ACE Translator did the job. We'll be in touch soon." - **US Navy**

"I did manage to work with the ace translator and it works fine. I'll do recommend the Ace translator for Gerber -> DXF conversion , Hope this will be done soon since we do need it." - **Philips Electronics**

"I found ACE Translator pretty useful and a nice product. I was able to convert a couple projects from Gerber into ODB++ format ...overall I'm very pleased with ACE Translator." - **Altera Corp.**

*"It worked well for my bmp to gds translation task - I had no trouble optimizing the results by tweaking the options. - **Volcano Corp.***

"We've used ACE, and it seems quite handy." - **Distance Lab**

"I used ACE Translator and found it very straightforward." - **Kaskon Networks**

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