

Shorten the Tape Out Cycle and Speed Time to Market

## gdzip™ & mezip™ Breakthrough Compression for Semiconductor Industry

### Benefits

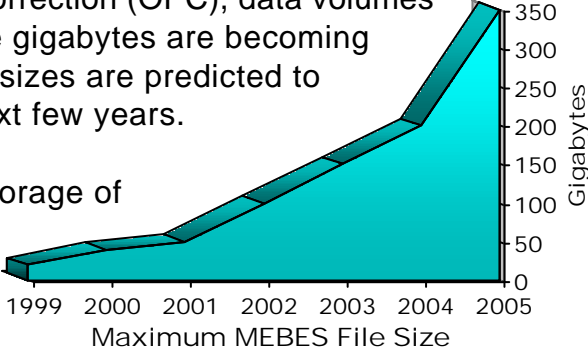
- Reduced tape out cycle time
- Faster file transfers
- More reliable file transfers
- Reduced bandwidth usage
- Defer bandwidth upgrades
- Faster archives & restores
- Save personnel time
- Infrastructure cost savings
- On-line & off-line storage savings



Solution-Soft™

### Semiconductor Industry Faces Exploding File Sizes

As IC designs become more complicated and with the aggressive application of Optical Proximity Correction (OPC), data volumes have exploded. Files sizes in the gigabytes are becoming commonplace. Furthermore, file sizes are predicted to increase significantly over the next few years.



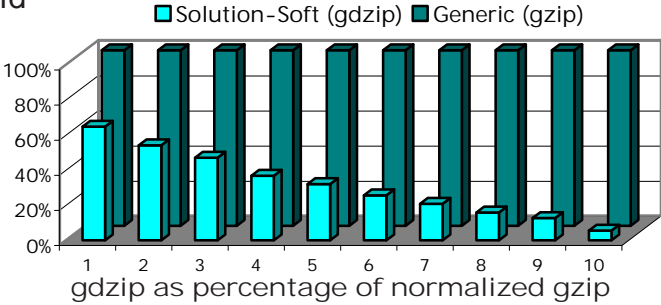
The transfer, manipulation and storage of GDSII and MEBES files among design houses, foundries, mask shops and tool vendors have become problematic.

Larger file sizes mean longer transfer times and more transfer failures. File compression/decompression times are increasing and storage requirements are expanding. Even system backup and archive times are increasing.

To overcome these challenges Solution-Soft has developed gdzip and mezip, based on patent-pending breakthrough technology. These solutions compress GDSII and MEBES files significantly more than all currently available compression algorithms (e.g. gzip and UNIX compress).

### gdzip - Breakthrough Compression Ratios for GDSII Files

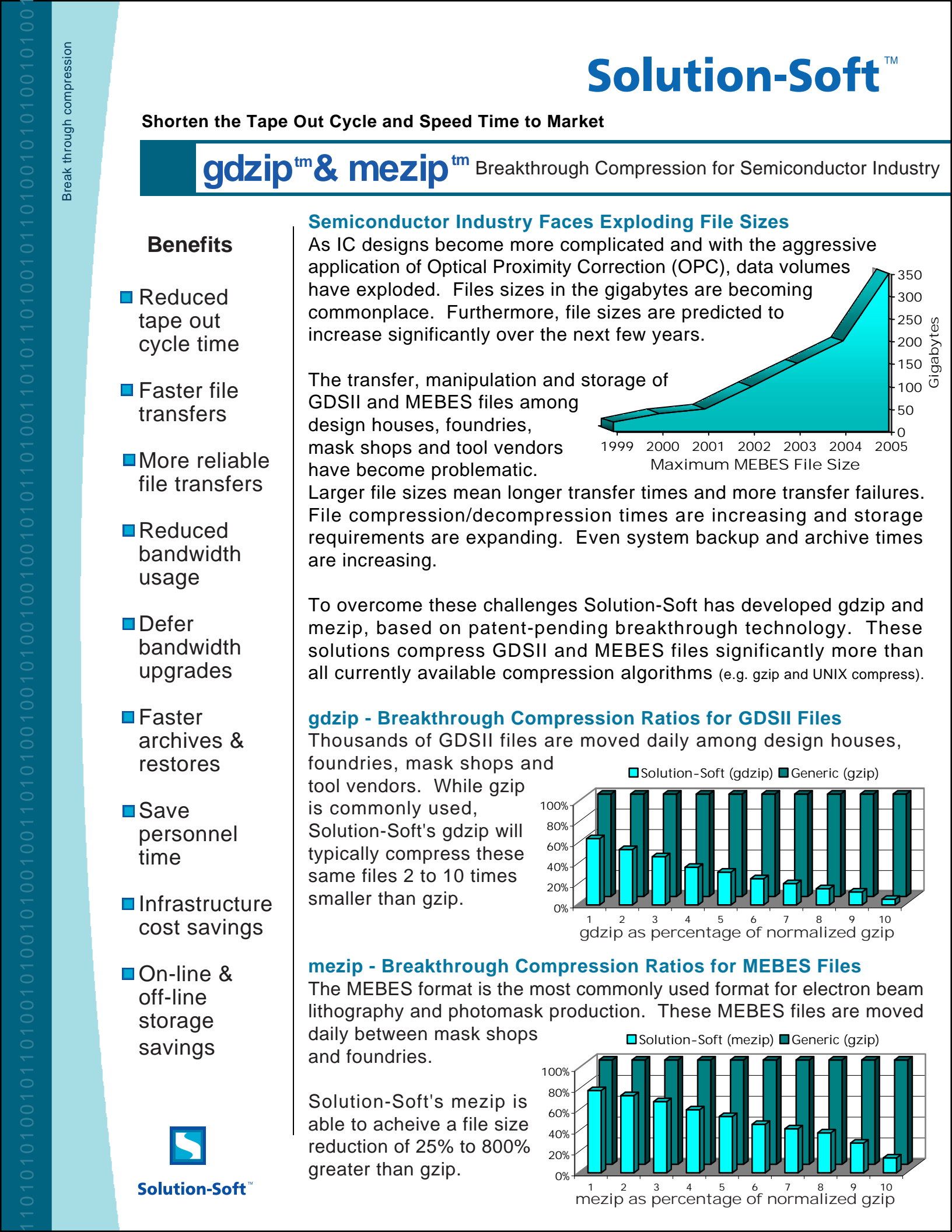
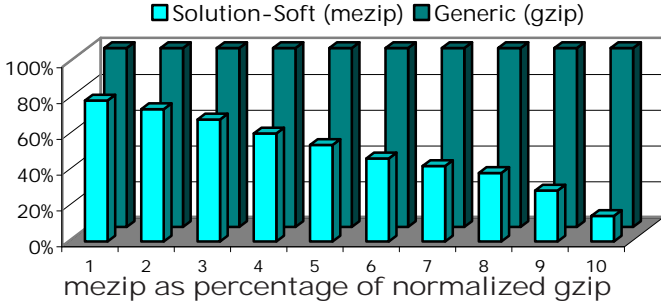
Thousands of GDSII files are moved daily among design houses, foundries, mask shops and tool vendors. While gzip is commonly used, Solution-Soft's gdzip will typically compress these same files 2 to 10 times smaller than gzip.



### mezip - Breakthrough Compression Ratios for MEBES Files

The MEBES format is the most commonly used format for electron beam lithography and photomask production. These MEBES files are moved daily between mask shops and foundries.

Solution-Soft's mezip is able to achieve a file size reduction of 25% to 800% greater than gzip.



## Transfer Files Faster and More Reliably

Because files compressed using gzip and mezip are much smaller, the time required for transfer is reduced by 25% to 90%.

By significantly reducing the size of the files being transferred, the chances of a line failure or transfer error occurring during the lengthy transfer are significantly reduced. Since failures are often not discovered until much later, the discovery and retransmission can add days to the tape out cycle.

To further ensure file integrity, gzip and mezip create block-by-block checksums during compression that can be used to verify that the decompressed file is identical to the original. This advanced block-level checksum provides superior data integrity to gzip, which generates only one file-level checksum.

## Double Your Bandwidth!

Instead of increasing your bandwidth to accommodate the transfer of ever-larger files, let gzip and mezip reduce the file sizes to where your existing network infrastructure and leased lines can accommodate them. The smaller file sizes achieved using gzip and mezip significantly reduce network bandwidth usage. By reducing file sizes, you extend the life of your existing and future infrastructure and delay the need to upgrade to expensive, larger bandwidth lines.

## Reduce Costs

Smaller files are less expensive to transfer, manipulate and store. Significant cost savings are achieved as a result of the following:

- 1) Less personnel time monitoring file transfers, handling failed transfers, managing network bandwidth, performing archives and restores as well as managing and juggling storage resources.
- 2) Reduced hardware costs for additional disk space, archiving media and more powerful computer and network equipment.
- 3) Infrastructure savings from reduced use of system resources and bandwidth
- 4) Deferred upgrades to expensive, larger bandwidth lines.

## Shorten the Tape Out Cycle and Speed Time to Market

During each tape out cycle there are many file transfers between the design house, mask shops and the foundry. Solution-Soft's gzip and mezip typically reduce large file transfer times by several hours. By also increasing the reliability, the total tape out cycle time can be shortened by days. A faster tape out cycle means faster time to market.

## Operating Systems Supported

Solution-Soft's GDSII and MEBES compressors support the following operations systems:

- Solaris
- Linux
- HP-UX
- AIX
- True64

Please contact us if you are interested in a different operating system or file format.

## Companion Product to Improve the Reliability for your File Transfer Process

Eliminate time-consuming retransmissions, corrupted data, and partial transfers using Solution-Soft's SafeVelocity File Transfer Product. SafeVelocity is specifically designed to provide highly reliable transfers of gigabyte-sized files while increasing security.

## Ordering information

For more information or to order, please contact our sales team at [sales@solution-soft.com](mailto:sales@solution-soft.com), (888) 884-7337, 1+(408) 346-1424 or visit our web site [www.solution-soft.com](http://www.solution-soft.com).

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