CORNERSTONE

Quick reference design guidelines for Ge-on-Si MPW #3 – May 2023

Sign-up deadline – Friday 30th June 2023

Mask submission deadline – Friday 28th July 2023

File format = *.gdsII* or .oas.

Manufacturing grid size = 1 nm.

Design area = **11.47 x 15.45 mm^2** with a bleed region defined as a 35 μm strip at the edge of the east and west edges for dicing for edge couplers.

Top cell name: 'Cell0_*[Name of Institution]*'.

1. Design rules summary

A summary of the design rules and GDS layer numbers can be found in Table 1 below.

Table 1 – Design rules summary.

Layer description	GDS number	Field	Min. feature size	Min. gap	Target lithography critical dimension
Germanium Etch 1 (1.8 μm ± 200 nm)	303	Light	700 nm	700 nm	700 nm
	304	Dark	700 nm	700 nm	
Bleed area	98	N/a	N/a	N/a	N/a
Cell Outline	99	N/a	N/a	N/a	N/a
Labels*	100	Dark	700 nm	700 nm	N/a

*Features drawn in the Labels layer will be merged into Germanium Etch 1 by the CORNERSTONE team.

If you have access to Tanner L-Edit software, on our website you can find a .tdb version of the template containing a DRC file that you can run to automatically find any design rule violations (note that the automatic DRC will not check all of the design rules, so it remains very important to read the design rules in detail).

2. Minimum feature sizes, tolerances and other design rules

- Minimum feature sizes, minimum gaps, and maximum feature widths for each GDS layer are detailed in Table 1.
- The target critical dimension for each GDS layer is listed in Table 1. Note that other feature sizes may have a small dimensional bias.

3. Technical support

For all queries, email cornerstone@soton.ac.uk.