

CORRIGENDA

Corrigendum to Commission Delegated Regulation (EU) 2022/1 of 20 October 2021 amending Regulation (EU) 2021/821 of the European Parliament and of the Council as regards the list of dual-use items

(Official Journal of the European Union L 3 of 6 January 2022)

On page 142, in the Annex, point 3B001.f is replaced as follows:

f. Lithography equipment as follows:

1. Align and expose step and repeat (direct step on wafer) or step and scan (scanner) equipment for wafer processing using photo-optical or X-ray methods and having any of the following:
 - a. A light source wavelength shorter than 193 nm; or
 - b. Capable of producing a pattern with a 'Minimum Resolvable Feature size' (MRF) of 45 nm or less;

Technical Note:

The 'Minimum Resolvable Feature size' (MRF) is calculated by the following formula:

$$MRF = \frac{(\text{an exposure light source wavelength in nm}) \times (K \text{ factor})}{\text{numerical aperture}}$$

where the K factor = 0,35

2. Imprint lithography equipment capable of producing features of 45 nm or less;

Note: 3B001.f.2. includes:

- Micro contact printing tools
- Hot embossing tools
- Nano-imprint lithography tools
- Step and flash imprint lithography (S-FIL) tools

3. Equipment specially designed for mask making having all of the following:
 - a. A deflected focussed electron beam, ion beam or "laser" beam; and
 - b. Having any of the following:
 1. A full-width half-maximum (FWHM) spot size smaller than 65 nm and an image placement less than 17 nm (mean + 3 sigma); or
 2. Not used;
 3. A second-layer overlay error of less than 23 nm (mean + 3 sigma) on the mask;
4. Equipment designed for device processing using direct writing methods, having all of the following:
 - a. A deflected focused electron beam; and
 - b. Having any of the following:
 1. A minimum beam size equal to or smaller than 15 nm; or
 2. An overlay error less than 27 nm (mean + 3 sigma);