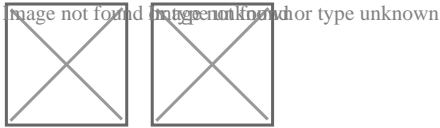


Russian Advanced Microchips?

Description



The Institute of Applied Physics of the Russian Academy of Sciences (IPP RAS) in Nizhny Novgorod is developing the first Russian lithography facility for the production of ultra-small nanometer microelectronics. This is reported on the Nizhny Novgorod Region Development Strategy website.

At the moment, scientists of the Russian Academy of Sciences have created the first demonstration sample of the equipment. On this installation, individual images on substrates with a resolution of up to the ultimate 7 nm were obtained.

In 2024, an “alpha machine” will be created. Such a machine will become a working machine on which a full cycle of operations can be performed.

In the second stage, a “beta machine” will appear in 2026. The equipment systems will be improved and complicated, the resolution will increase, productivity will increase, many operations will be robotized, as noted on the website of the Nizhny Novgorod strategy. The machine will already be able to be used in large-scale production.

And at the third stage (2026-2028), the domestic lithograph will receive a more powerful radiation source, improved positioning and feeding systems, and will begin full-scale operation.