

Q&A Session

Briefing Session Outline

Thursday, March 3, 2022, 10:00 a.m. - 11:00 a.m. / Japan Standard Time

Zoom Webinar

For institutional investors and analysts

Question 1. Why is non-roughening technology needed? Also, please tell us about the progress of the development of non-roughening technology.

Answer The first reason why non-roughening technology is needed is to support high frequency devices. When electric signals flow on the conductor surface at a very high speed, the roughened surface becomes an obstacle, decreasing the transmission speed. If the surface is perfectly smooth (not rough), there is no signal transmission loss. This is one reason. However, there are test results showing that even if the surface is roughened, if it is ultra-finely roughened to about 0.1 μm (which is possible with our technology), there is almost no transmission loss. So we still do not know whether non-roughening treatment is absolutely necessary to eliminate transmission loss. However, we can say for sure that non-roughening is effective at reducing the transmission loss of electric signals. Another reason is that with increased miniaturization of package substrates, a minimum surface roughness is desired.

Regarding the progress of development, we have been conducting research and development on non-roughening since the beginning of the 21st century, and five or six years ago, we commenced mass production of a special agent for a non-roughening treatment process. It is used, for instance, for supercomputers. We will continue to develop agents for non-roughening treatment processes, which will be used also for package substrates with fine and complex structures.

Question 2. What will the new domestic production site mainly manufacture? Will there be any changes from now? By what percentage will the total production capacity increase after the factory starts operation in 2025?

Answer For now, we are planning to manufacture our key product, the CZ series including CZ-8101, at the new factory. We intend to develop a facility plan that allows for high levels of production flexibility so that we can flexibly respond to increases in demand for fine roughening treatment. With the new factory, the production capacity will increase by 50% from the current capacity in Japan. We plan to acquire a piece of land larger than what is needed for the planned new factory, so that we can expand the factory in the future. However, if it becomes necessary to, let's say, nearly double the production capacity, we will also expand the capacity of the existing Amagasaki and Nagaoka Factories. It will not be such a big investment. By taking these measures, we will increase productivity and increase production volume.