SHINKO

July 29, 2022
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SHINKO ELECTRIC INDUSTRIES CO., LTD.
Stock exchange code: 6967, TSE Prime

SHINKO ELECTRIC INDUSTRIES CO., LTD. to Increase Production Capacity of Plastic BGA Substrates for Semiconductor Memory

NAGANO, Japan, July 29, 2022 – SHINKO ELECTRIC INDUSTRIES CO., LTD. (SHINKO) today announced that it will increase production capacity of plastic BGA substrates for semiconductor memory.

Applications for semiconductors are anticipated to expand in a wide range of fields, further enlarging the market in the future, following the progress of digitalization in society and the economy. SHINKO has been focusing on allocating management resources for markets with high growth potential, including flip-chip type packages for high-performance semiconductors and ceramic electrostatic chucks for semiconductor manufacturing equipment. We have decided to make capital investment to increase the production capacity of plastic BGA substrates that support smaller and thinner semiconductor memory.

Our plastic BGA substrates are widely used in semiconductor memory in smartphones and automobiles as well as in Electronic Control Units (ECUs) for automobiles as semiconductor packages. In the near future, semiconductor memory will require higher speeds and higher capacities, so demand will increase, buoyed by the growing use of AI and IoT, the dramatic increase in data traffic due to the spread of 5G, etc., and the further electrification of automobiles, such as infotainment systems. In light of this situation, it is expected that the needs for even finer, thinner, and lower power semiconductor memory will increase. To respond to these needs, we have decided to construct a new building at our Arai Plant in Myoko City, Niigata Prefecture to increase the production capacity of plastic BGA substrates using the Modified Semi Additive Process (MSAP), a leading technology for finer line and thinning.

1. Overview of capital investment, as planned

1) Products
Plastic BGA substrates for semiconductor memory

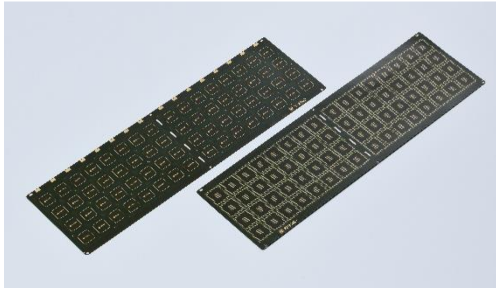
2) Investment amount
28 billion yen

3) Production capacity
This capital investment is expected to increase the production capacity of plastic BGA substrates for semiconductor memory compared with the current level approximately 2-fold, including the contribution from the new production line (scheduled to start operation in FY2023) that has already started making investment in the existing building.

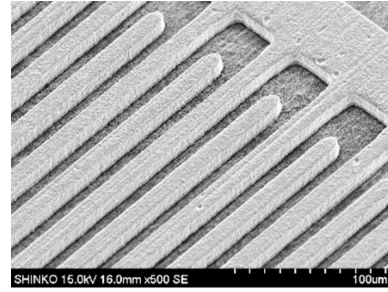
4) Overview of the new building

Location:	Arai Plant (Myoko City, Niigata Prefecture)
Building structure:	Three-story steel frame structure (Partly four-story)
Total floor area:	14,000 m^2
Schedule:	Start of construction: FY2024
	Completion of construction: FY2025
	Start of operations: FY2026

The new building will be 100% powered by renewable energy.



Plastic BGA Substrates



Fine pitch pattern
using the advanced technology
taken through a scanning electron microscopy

［About Plastic BGA Substrates］

To meet the requirements for smaller and thinner semiconductor packages, our plastic BGA substrates are mainly used in semiconductor memory for smartphones and automobiles as well as in ECUs for automobiles, requiring higher reliability. We have evolved the MSAP, a leading technology that forms fine pitch pattern by plating technology instead of etching technology, to meet the requirements for smaller, thinner, more multilayered, and higher density semiconductor packages.

The impact of the above capital investment plan on consolidated financial results for the fiscal year ended March 31, 2023 will be negligible.

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