

For Immediate Release

**TAIYO YUDEN Announces New Proposal of Embedded-Parts Multilayer Wiring Substrate “EOMIN™” for Double-Lens Cameras**

*Developed for Double-Lens Cameras for Smartphones*

TOKYO, June 18, 2015 - TAIYO YUDEN CO., LTD. has developed a commercial production technique applicable to double-lens camera modules in which two image sensors are mounted on a circuit board made of a copper-core embedded-parts multilayer wiring substrate “EOMIN™”.

This embedded-parts multilayer wiring substrate technique was developed for camera modules to be incorporated into thin mobile devices such as smartphones and tablets.

Camera modules embedded in smartphones and tablets, which are equipped with an increasing number of pixels, are also receiving stronger demand for a further reduction in thickness. To fulfill these two requirements simultaneously, double-lens cameras, in which images from two embedded cameras are used to synthesize a single image, have actively been developed. Using a double-lens technique, the height of the lenses can be reduced, allowing the thickness of the camera module to be reduced and images with a higher resolution to be obtained. Since double-lens cameras require the optical axes of their two image sensors to be precisely aligned, larger and longer module circuit boards with a high degree of flatness and stiffness must be used.

In addition to its superior flatness and stiffness, “EOMIN™” not only realizes a smaller camera module by embedding parts, but also possesses many different advantages required of camera modules such as heat dissipation and noise immunity performance, which makes it the optimum choice for circuit boards used in double-lens cameras. We will continue with the development of “EOMIN™” in order to contribute to the realization of thinner, higher performance camera modules.

**Technology Background**

Since the launch of the embedded-parts multilayer wiring substrate “EOMIN™” product in 2006, TAIYO YUDEN has enhanced the sophistication of parts-embedding techniques, including higher accuracy mounting of embedded parts, finer via holes and copper wiring, and more reliable copper plating junctions.

Recently, TAIYO YUDEN developed a technique that allows multiple image sensors to be simultaneously mounted on “EOMIN™,” which has found wide applications in a variety of camera modules. This technique can be used to provide optimum circuit boards with the excellent flatness and stiffness that are necessary for double-lens camera modules.

TAIYO YUDEN is committed to achieving further reductions in “EOMIN™” thickness and to modularize many different features, thus contributing to realizing more sophisticated, smaller and thinner devices.

\*“EOMIN” is a registered trademark or trademark of TAIYO YUDEN CO., LTD. used both in Japan and other countries.

■ Application

For camera modules that are incorporated into thin mobile devices, including smartphones and tablets