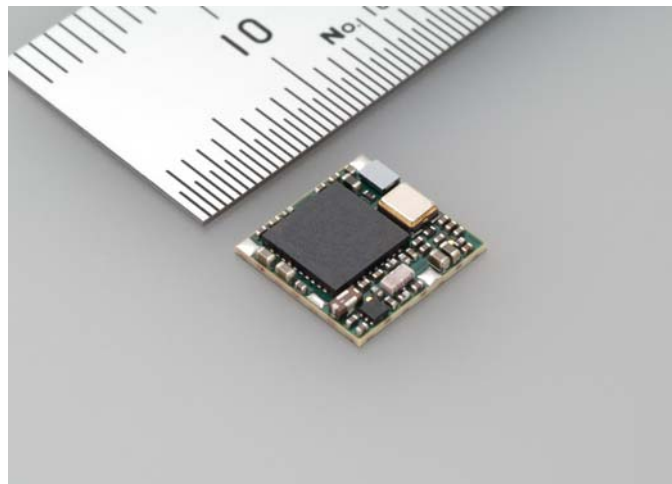


For immediate release

## Taiyo Yuden Announces Production Expansion of an Innovative Copper-core Embedded-parts Multilayer Wiring Substrate “EOMIN®”

*Full-scale Launch into the Embedded-parts Circuit Board Market for Smart Phones and Tablet PCs*



TOKYO, June 9, 2011 — TAIYO YUDEN CO., LTD. today announced expansion of production of an innovative multilayer wiring substrate, “EOMIN® (Embedded Organic Module Involved Nanotechnology)”, which uses a copper core in which parts are embedded. It is optimum for the functional modules in mobile devices like smart phones and tablet PCs.

This product is a circuit board for use in functional modules mounted in mobile devices like smart phones and tablet PCs, and as well as the miniaturization and dense packaging features of such a multilayer wiring substrate which has embedded parts, the special characteristics of high rigidity, high reliability, good heat dissipation, and noise durability are all realized. Therefore, it could reasonably be expected to play a role in the trend for small size, low profile, and high performance.

Mass production was started from 2006, and from July of 2011, a system will be set up for a monthly production of 5 million pieces. There will be a full-scale launch into the embedded-parts circuit board market aimed at mobile devices such as smart phones and tablet PCs.

### Technology Background

With the continued miniaturization and high performance in smart phones, various functions, including for example, Internet, e-mail, camera, GPS, wireless LAN, ‘one-seg’ television and the like, are all assembled into smaller and smaller size housings and the speed of development to mass production is getting faster and faster. For that reason, the technique of modularizing each functional block has been taken, but with the demand for increasingly small size and low profile, a change in the module structure itself is now needed, which goes beyond the conventional approach of simply mounting individual module elements on the surface of the circuit board. One such anticipated module construction is the embedded-parts multilayer wiring

substrate technology where parts are built into the wiring substrate, and there is now a lot of activity in its development and application

Accordingly, Taiyo Yuden, by adopting copper as the core for the embedded-parts multilayer wiring substrate, has commercially released the innovative “EOMIN®”. This product retains the characteristics of small size and low profile parts embedded in the wiring substrate, and adds the properties of high rigidity, high reliability, good heat dissipation, and noise durability. Also, embedded passive parts, such as laminated ceramic capacitors and inductors, as well as RF devices, have been studied at the company, and the module has been optimized from both the aspects of the wiring substrate and the embedded parts themselves.

At the same time as providing both the wiring substrate and module for “EOMIN®”, Taiyo Yuden will also continue to pursue the trend for the small size and low profile of passive parts such as laminated ceramic capacitors, furthering research and development in order to accurately meet the market needs both in terms of the wiring substrate and the parts.

#### ■ Applications

Specifically for functional modules or the wiring substrate used in modules which are mounted in mobile devices such as smart phones and tablet PCs.

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

#### EOMIN® Features

- Low noise  
An improvement in tolerance to noise due to the shielding effect from the copper core
- Highly heat radiation  
The high thermal conductivity of the copper core effectively dissipates heat coming from IC chips, etc.
- Stiffness  
Constructed with a built-in copper core, the rigidity of the module itself is increased
- High reliability  
Jointed with embedded parts by electrolytic copper plating

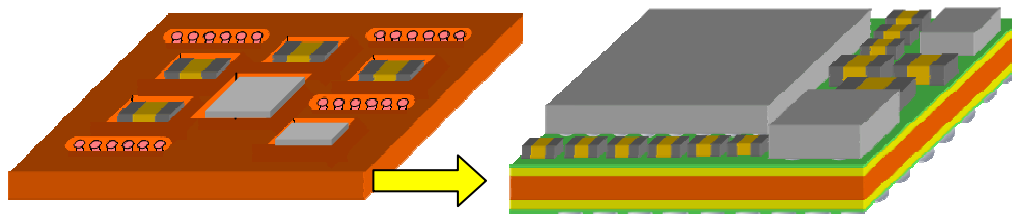


Figure 1. EOMIN® Exterior View (Left: copper core and embedded parts, through holes, Right: module)