

## Testing SMARC Modules

**Munich, April 2015 – Yamaichi Electronics has developed a new test adapter for the SMARC computer-on-module standard. It realises the perfect alignment of the contacts and allows for 100% contacting reliability. Due to the use of spring probe pins very high contact cycles can be reached.**

SMARC stands for Smart Mobility ARChitecture. It is a specification published by the Standardization Group for Embedded Technologies e.V. (SGET) for computer-on-modules (CoMs). Its advantage is the low power consumption of the modules due to the implementation of ARM or other low-power processors.

Yamaichi Electronics' SMARC test adapter is a performance controlled system according to the SGET SMARC specification. It is durable and highly reliable as a contact system. As it is volume test ready it can increase the test output considerably. Thus it reduces the cost per tested module. Furthermore its operation is easy and secure.

This test adapter within the YED900 series of Yamaichi Electronics' test adapter series can be used for applications like

- evaluation bench tests and
- reliability tests from -50°C up to +150°C

The socket is designed with compression mount technology (CMT), therefore no soldering is needed. Selected materials like aircraft aluminum, PEEK and ceramic PEEK make the adapter robust. The test adapter can be used as "plug and play" suitable test vehicle.

### **Reliable Probe Pin Technology**

SMARC modules have gold pads as contacting surface. The best contact technology for such surface areas are fine pitch probe pins. The pins, known from semiconductor testing, have a very long life time. The life time for the SMARC test adapter is specified up to 50k mechanical cycles.

For contacting the module pads, a conical type plunger tip is commonly used. By using such a tip it can be assured that only a very small witness mark is formed on the module contact pad. The fine-pitch pins are available for pitches starting from 0.3mm. There are also Kelvin type pins available.

### **About Yamaichi Electronics**

Yamaichi Electronics is a market leader for Test & Burn-In sockets, connectors and connection systems. Their reliability and functional dependability are absolutely essential for the success of the overall project. Yamaichi Electronics established themselves on the world market very quickly as a manufacturer of high-quality, reliable components for demanding applications in various markets and applications: semiconductor, automotive, medical, telecom/datacom, industrial automation, mobile computing, mobile phones, GPS systems, consumer, and many more.

Yamaichi Electronics Deutschland GmbH

Concorpark, Bahnhofstr. 20, 85609 Aschheim-Dornach, Germany

Tel. +49 (0)89 – 4 51 09-0

Fax: +49 (0)89 – 4 51 09-110

[info-de@yamaichi.eu](mailto:info-de@yamaichi.eu)

[www.yamaichi.eu](http://www.yamaichi.eu)