

 **PRESS INFORMATION**

## Avnet Memec-Silica, StarChip and Trusted Objects unveil an innovative security platform for the Industry 4.0 and the IoT markets

**Paris, April 5, 2016** – Avnet Memec - Silica, an Avnet, Inc. (NYSE: AVT) company, StarChip, a fabless semiconductor supplier of secure microcontrollers and Trusted Objects, a provider of secure firmware and security services, today announced their partnership for the deployment of an optimized security platform, encompassing a family of certified secure elements with tailored security protocols from sensor to enterprise server and unique personalization services aimed at serving every customer for the Industry 4.0 and the IoT markets.

The initial solution relies on a low-cost, low-power secure 32-bit microcontroller supplied by StarChip, with a dual certification from EMVCo (Europay Mastercard Visa) and Common Criteria Evaluation Assurance Level, delivered in a 3x3 DFN6 package and other standard packages making it an easy-to-integrate companion chip in any sensor, device, or gateway.

The StarChip secure microcontroller is programmed at Avnet Memec-Silica's secure warehouse with a firmware supplied by Trusted Objects, adding a set of functions and commands tailored for the exact requirements of the customer's final application and global security architecture. The programmed secure microcontroller thus becomes a secure element with the capability to perform cryptography primitives and complex functions comprising and not limited to AES, ECC encryption, decryption, signature, secure key renewal (Diffie-Hellman), on-board key generation, true random number generation, handling of certificates, and more while never exposing secret keys to the outside world.

Last but not least, this secure element is personalized with the support of Trusted Objects at Avnet Memec-Silica's secure warehouse with unique public keys, private keys, certificates and identifiers generated on-site by a dedicated HSM (Hardware Security Module) as per the security scheme required by each customer's application and global security architecture.

Secure elements and, if needed, matching whitelists, are then securely made available to the customer or its manufacturing partner.

Example codes implementing various secure protocols, both at the embedded and server levels, will be provided and demonstrated with Avnet Memec-Silica's Visible Things™ IoT platform and made readily available to our customers.

Philippe Fremont, vice-president of Technical Marketing EMEA with Avnet Memec-Silica comments: "Whereas connecting objects, devices and machines to enterprise IS/IT enables a breadth of new services in the consumer and industrial IoT, we believe it should not jeopardize the global security of such systems. This is the reason why Avnet Memec-Silica together with our partners are proud to introduce this highly flexible innovative certified security platform able to handle end-to-end security inside and above communication networks for every one of our customers."

Hanène Maupas, vice-president of StarChip Sales & Marketing comments: "When you open assets living in your network to the Internet, you increase the "attack surface" because you are extending your business model to new areas, partners and user types. The security answer to this fundamental change is to protect the system against any potential attacks including obtaining private or confidential data, manipulating or controlling devices, confusing or denying service to applications that use and supply data within IOT systems and specifically in Industry 4.0 revolution. A secure element based on a secure micro controller, a secure firmware and personalized by the issuer is already widely used and proved its efficiency in different use cases such as payment, access control and e-government. Adapting this technology to be used in Industry 4.0 and IoT is the innovation that we are bringing to the market with our partners Avnet Memec-Silica and Trusted Objects."

Sami Anbouba, CEO of Trusted Objects comments: "The broader deployment of the IoT will require trust in the connected objects and in the data transmitted; in this respect, a Secure Element solution embedded into the object is one of the most efficient security solutions to protect the entire IoT network against a growing number of attacks. We are proud to have brought our digital security expertise to co-develop with our partners Avnet Memec-Silica and StarChip a unique Secure Element solution that will enable all players in the IoT chain to dramatically increase their confidence in the objects and the data."

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### **About Trusted Objects**

Trusted Objects provides security firmware designed to meet the security needs of the IoT applications such as authentication, privacy, intellectual property protection, secure exchanges, among others. These firmwares are embedded in a secure microcontroller to form an optimized "Secure Element" which is the heart of the end-to-end security solutions built to address market expectations in terms of tamper resistance, footprint, consumption, ease of integration and competitiveness. Trusted Objects also delivers personalization services tailored to the fragmented market of IoT and security consulting services for a fast deployment of comprehensive solutions that meet the highest security requirements. For more information, visit [www.trusted-objects.com](http://www.trusted-objects.com)

### **About StarChip®:**

StarChip®, part of Safran Group, is a dynamic semiconductor company that enables customers to directly benefit from our unique, optimized value chain system. We design and qualify products for mass production, then license our solutions for purchase directly by our customers through qualified foundries and test houses. StarChip® products are based on state-of-the-art, Flash-based 32-bit architectures. They are designed to offer maximum integration, providing support for embedded, innovative security technologies, analog functionality and connectivity and control interfaces. The result is a flexible set of solutions that can easily meet the requirements of a wide variety of markets, including smart cards and security, consumer, automotive and industrial applications. <http://www.starchip-ic.com/>

### **About Avnet Memec - Silica**

Avnet Memec - Silica is the European semiconductor specialist of Avnet, Inc., one of the leading global distributors. Customers may expect state-of-the-art technologies, comprehensive technical support and advanced supply chain and logistics services. Avnet Memec - Silica is a partner of leading semiconductor manufacturers and innovative solution providers over many years. With a team of more than 200 application engineers and technical specialists, Avnet Memec - Silica supports projects all the way from the idea to the concept to production. For more information, visit [www.avnetmemec-silica.com](http://www.avnetmemec-silica.com)

### **About Avnet, Inc.**

From components to cloud and design to disposal, Avnet, Inc. (NYSE:AVT) accelerates the success of customers who build, sell and use technology globally by providing them with a comprehensive portfolio of innovative products, services and solutions. Avnet is a Fortune 500 company with revenues of \$27.9 billion for the fiscal year 2015. For more information, visit [www.avnet.com](http://www.avnet.com).

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