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Press release

3D MicroPrint GmbH integrates SAMPL technology as the first manufacturer in their systems

Chemnitz, May 2, 2018 – 3D printing becomes blockchain ready. As a printer manufacturer for high-precision additively manufactured metal components, 3D MicroPrint GmbH is the first to integrate the SAMPL technology into their systems. Together with Fraunhofer ENAS, PROSTEP AG, consider it, NXP and the University of Ulm, a first prototype for the Secure Additive Manufacturing (SAMPL) platform will be integrated into a 3D printer for the production of metal components. 'With the platform, a secure data exchange between a client and us as a printer service provider is possible. Thus we can provide security to our customers that their data will only be used for this production and that highly sensitive data will not fall into the hands of others', explains Falko Böttcher, development engineer at 3D MicroPrint GmbH.

The joint project, funded by the Federal Ministry for Economic Affairs and Energy (BMWi) with 2.6 million euros over three years, achieved an important milestone in the development of an integrated security solution. The project investigates how the data can be protected from the creation of 3D print data, through the transfer, to the production and counterfeiting of the resulting products can be avoided. The platform is based on Blockchain technology and the OpenDXM GlobalX data exchange solution from PROSTEP AG. Smart contracts are used to create a digital license for the data to be printed and are stored in a blockchain. The license encodes the exact number of copies of the component and the link for the download via the secure data exchange platform OpenDXM GlobalX. By triggering the Smart Contract, the consumption of the license for the component to be manufactured is registered in the blockchain and thus traceable. For 3D printing service providers in particular, the technology offers enormous added value through the verifiability of the authenticity of the printed components. In addition to demonstrating the use of original data, customers are shown that their safety requirements are taken seriously and put into practice.

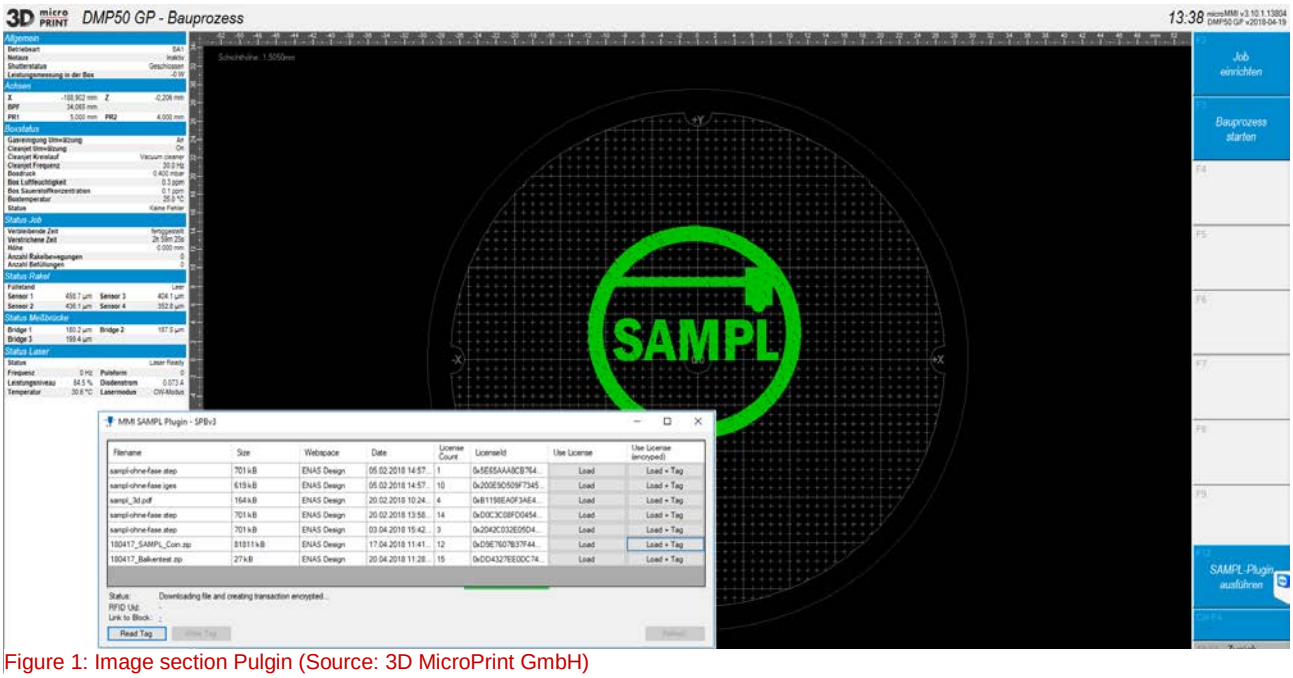

Figure 1: Image section Pulgin (Source: 3D MicroPrint GmbH)

Project consortium of the project SAMPL
PROSTEP AG (consortium leader), 3D MicroPrint GmbH, consider it GmbH, Fraunhofer ENAS, NXP Semiconductors Germany GmbH, Hamburg University of Technology - Institute for Aircraft Cabin Systems, University of Hamburg - Hamburg Research Center for Information Systems, University of Ulm - Institute for Distributed systems.

About 3D MicroPrint GmbH
3D MicroPrint GmbH is known for high-precision micro parts manufactured by Micro Laser Sintering. Since the company was founded in 2013 by EOS GmbH and 3D-Micromac AG, the additive manufacturing process has been further developed for micro parts and has been adapted to run an industrial production. Today we are providing our customers the entire portfolio of design consulting for additive manufacturing, feasibility studies and parts production up to their own 3D MicroPrint Micro Laser Sintering system. Furthermore 3D MicroPrint offers material developments for exclusive technologies on demand. The key applications for micro parts are medical industry, wearables, semiconductors and micro industries, high frequency applications as well as aerospace.