



Chip Card & Security provides the heart of Infineon's new access control system

We are migrating to a new access control system – why's that? The main motivation is updated security environment conditions coming from our site certification body, German BSI, who is requesting to upgrade the security level of the existing system.



Infineon has decided for CIPURSE™ not only because it has been co-developed by us, but due to its high level of security - we won the German IT-Security Prize 2012, do you remember?

The advantages of our solution are numerous, mainly flexibility through the open standard CIPURSE™ and the Java Card platform supporting multi-application use cases (in addition to access control we use payment and logon, depending on the site), strong AES encryption of employee data (i.e. fingerprints) on the badge, secure storage of encryption keys on the reader using our SLF 9630 CIPURSE™ SAM and encryption of transferred data.

With this project, we have established a showcase to create further business: our development partner PHG has started to market this highly secure CIPURSE™ based solution. Other reader vendors (e.g. Siemens) also started to implement CIPURSE™ access control solutions and will soon offer respective products.

Chip Card and Security is not only providing the smart card platform and the CIPURSE™ open standard technology, but also its “Product to System” competence.



The CIPURSE™ System Integration CoP (Community of Practice) has supported the project team within Infineon (BC, IT OS), the reader manufacturer, and the card supplier (Austriacard). Team members were located in Bangalore, Graz, Munich, and Villach.

Requirement and design phase was started in February 2016 and completed within 3 months. The software engineering team of CCS in Bangalore started the development of a CIPURSE™ Java Applet immediately after design. During the 5 months of development process, reader vendor PHG was actively supported by the AE team.

The final technical concept was presented to the Common Criteria security evaluation body TÜVIT and accepted before the start of technical implementation. The security level of the new solution has been successfully audited at the pilot sites Graz and Klagenfurt in October.



As the project timeline for the first roll-outs in Graz, Klagenfurt and Bangalore did not allow PHG to implement a CIPURSE™ personalization device (fingerprint enrollment station), an interim solution has been designed and engineered by the AE team in Graz, which allowed to stick the ambitious project timeline. A commercial personalization solution from PHG will become available in February 2017.



In the current project phase, the detailed multi-application aspects of the smart card and the respective pre-personalization topics for CIPURSE™, Legic (existing infrastructure for payment) and the cryptovision PKI (logon) applications have been clarified with the card manufacturer, followed by rolling-out the new employee badges and access control system to all Infineon's Chip Card and Security sites until September 2017 (Graz, Klagenfurt, Bangalore, Villach, Augsburg, Grossostheim, Regensburg, Munich, Dresden, Bucharest, Malacca, Singapore, Wuxi, Milpitas, Morgan Hill, and Hayward in order to develop it further).