

# Securnet: the Preferred Choice

*ST8100 Securnet is the preferred integrated security management system for many major institutions and properties in Asia. In this issue of Electronics Review, we examine how Securnet is used to provide access control and enhance security at the National University of Singapore and Beijing Capital Museum, and how Securnet may be deployed to deter terrorist attacks (page 8-10).*

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## Smartcard Access for NUS

In keeping with the latest technology, the National University Of Singapore (NUS) called for a tender in 2004 to upgrade their existing contact smartcard access control to a contactless smartcard based Access Control System. ST Electronics was awarded the contract to design, supply, install and maintain the access control system for NUS.

This challenging project requires ST Electronics to upgrade more than 700 readers spanning 98 sites without any service interruption to their normal office operations. During the upgrade, the security of the facilities and buildings must not be compromised at all times.

Using Mifare cards, the proposed system must be able to read the relevant encoded information in the Mifare chip during the access verification process to grant or block access to the secured premise. The information includes NUS ID Number, PIN Number from the NUS ID card, Access Group and Lost Card Number.

The requirements also called for an end-to-end solution that involves the seamless data migration from their existing system to the new working system, which must be configured to run on the existing NUS campus network infrastructure.

Singapore Technologies Electronics' ST8100 Securnet controller can meet NUS' stringent requirements that stated a capability to store a minimum of 15,000 cardholders' information and 10,000 events. As security is of utmost importance, data encryption

and security keys have to be firmly put in place.

The software supports a Centralised Access Control Management that allows the site administrator to manage all the door access readers from a single point. The administrators are allowed an exclusive dedicated administration for their own site.

Due to the large number of students in the campus, the software must be able to handle access groups. Every cardholder has been assigned a group ID which is encoded in the Smart Chip. When required by the respective site administrators, Securnet is able to read the group ID from the Smart Chip and compare against the list of group white-list before granting or refusing access to a designated location as determined by the respective site administrators. The access group facility also allow the administrators to assign arbitrary access groupings with varying security level to a group of card holders based on their Staff/Student ID which has been encoded into the chip.

Besides allowing the programming of cards and access rights, Securnet also provides on-demand reporting of events and system data, automatic notification of selected "alarm" events, and an audit trail feature.

Securnet allows integration with other security devices such as fire alarm and CCTV Surveillance system. It can also be linked to elevator, carpark and barrier gates systems to control access should there be such a requirement in the future.

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