

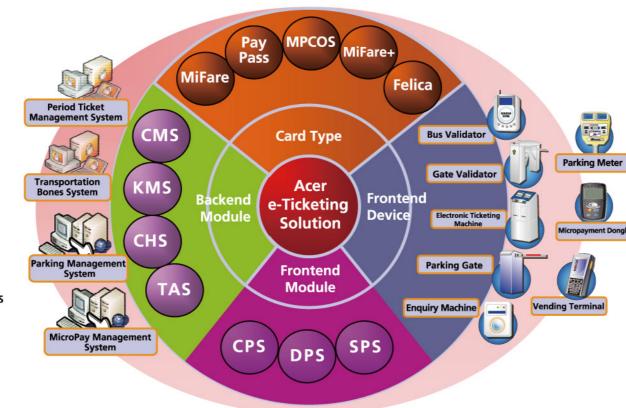


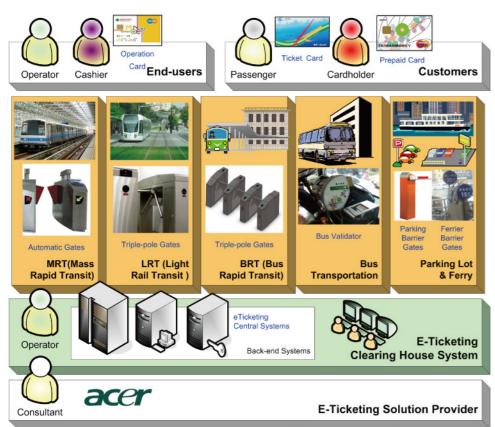


# **ACE**MegaMicro

# **Solution Advantage**

- 1. Complete and Expandable total Solution
- 2. End-to-end Secured System Design
- 3. Stable and Modularized Backend core system
- 4. Stable and Flexible contactless ticketing Device
- Abundant Integrating Experience (Ticket/Micropayment/Credit Card)
- 6. Centralized monitoring mechanism
- 7. Capable of Supporting Highly Secured CPU cards





## **Key Features**

- 1. Support all kind of contactless card/token media.
- Modularized system design can be easily catered for each customer's special needs.
- System and frontend devices can be easily separated easily mixing up with other vendors' frontend devices or backend system.
- Flexible system scale implementation can be used in small volume or high volume environment
- 5. Secured system design system constructed completely following the standard of financial institutions.
- Provide the web-based user interface for easy modification and deployment.
- Provide a well-designed gateway to easily connecting to the existing banking system.
- Provide various modules to expand the e-Ticketing Benefit (ex: Social welfare Management, Loyalty Management, Commutation Ticketing Management > Parking Management)
- Support multiple charging schemes: fix rate, variable rate and manual key-in.
- 10. Implement fully automatic fare calculation for variable rate charging
- 11. Provide various types of report to perform analysis on drivers, stops, routes and depots/stations to suit bus companies' needs.

# **Acer e-Ticketing System**

## **Key Modules**

#### 1. e-Ticketing Central System

#### **Key Management System (KMS)**

It provides the functions for key management, data encryption and data decryption around the solution infrastructure. All of the keys and algorithms are protected by KMS, and this system stores the keys in HSM.

#### e-Ticketing Integration Interface (TII)

The interface provides all kind of the management functions of e-Ticketing Central System. It makes more convenient and efficiency to operate system through only one interface, and provides common data maintain functions to each module.

### Card Management System (CMS)

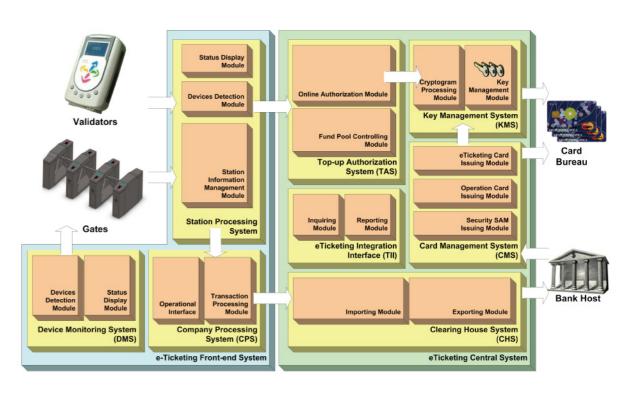
The system is a special function controls whole flows of smartcard issuing and manufacture process before deliver to user side which is controlled by CMS. It creates issuer and ticket profiles to define business logic and scheme and also manages card life cycle and status start from card issuing to card using.

#### Top-up Authorization System (TAS)

The system is the core of back-end system for transactions, which has strong capacity to support whole ticketing transactions and integrated with our stored-value mechanism. The function of authorization can accepts those uploaded transactions from all front-end devices, and makes sure them correctly and prompts response on the transaction message. It checks its accuracy and responses to front-end devices immediately.

#### Clearing House System (CHS)

The system is the last system in our entire back-end system. It has to collect all transaction data from all validators, vending terminals and gates in front-end side. This system focuses in data collection, unified management and storage, as a clearing house for all e-ticketing transactions.



#### 2. e-Ticketing Front-end System

Station Processing System (SPS)

The system provides suitable functions and screen for managers and operators to view and control the latest status in the station. If there is anything abnormal, SPS will alarm the staffs/operators and record all logs in the system. Via this system, managers or operators can timely monitoring transactions and devices, so that it could increases productivity and decreases the cost of the manpower and time.

Device Monitoring System (DMS)

The system is in charge of managing the front-end devices and monitoring the status of the hardware devices to provide officer with maintenance information in back-end side. Because front-end devices are installed in every bus station, it's difficult and expensive to maintain these devices in place. In order to get over this difficult problem, we design Device Monitoring System to satisfy the need of the daily operation. The operators in central control room can efficiently control the latest status for every front-end device via the remote monitoring management. Device Monitoring System cooperates with Station Processing System (SPS) to collect the data for SPS to timely monitor every device in the bus station.

Company Processing System (CPS)

The system collects all ticket transaction records and transfers to the Clearing House System (CHS) in order to produce required reports. The transaction record includes top-up and deduction of any types of tickets or prepaid cards. According to the operating rule, transportation companies have to setup the transport operating parameters (Ticket price, station information and etc.) and the parameters will be released to the front-end devices as the transaction deduction rule.



#### About acer

Acer as being the leading PC designing / manufacturing company around the world, we also have a lot of experiences in implementing electronic ticketing system in Taiwan area. We are also one of the few companies that have front-end device manufacturing and backend system implementation experience for electronic ticketing system at the same time in the industry.

With this background we had successfully launched the first electronic ticketing system that meets the demand of financial institutes and transportation companies in year 2004 in Southern Taiwan.

#### **Contact Information**

Acer Intelligent Identification & Transaction Biz 8F, 88, Sec. 1, Xintai 5th Rd., Xizhi New Taipei City 221, Taiwan, R.O.C. Tel:886-2-26963131 Ext:5030 Fax:886-2-86911070

Mail:contact@eservice.acer.net Website: www.acer.net