



# Automated Fare-collection Systems for Metro Transit Systems

Banking on their long-term partnership with Moxa, a metro rail company in Asia contacted Moxa for computing solutions to retrofit their automated fare collection (AFC) system for improving system flexibility and reliability at busy metro stations.

## Why Moxa

- Proven expertise in deploying and integrating automated fare collection systems for the long term
- Enhanced system durability against frequent program/erase (P/E) cycles on the storage
- Product reliability and quality to withstand harsh operating temperatures



## BXP-A100-E2 Series

Box computers with Intel Atom® X Series processor

- 18 COM, 2 LAN, and 6 USB ports
- -30 to 60°C operating temperature range
- Customization-friendly platform with preinstalled high-performance SSD to ensure system durability



Product Page



Solution Brochure

## System Requirements

- Reliable computing solutions for automated gates (AG), token-vending system, and card-vending system
- Improved storage rewrite endurance to extend component lifespan
- Product reliability and quality for operational stability

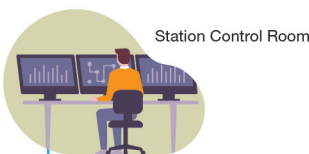
## Moxa's Solution

In line with customer's requirement for long-term solutions that can integrate more systems and payment options, Moxa proposed a comprehensive computing platform with 18 COM ports that can meet all their requirements instead of just selling them three different computing solutions.

A customized BXP-A100-E2 box computer provides 18 serial ports, enabling connection flexibility above and beyond the current requirement for automated gates, token issuing machines (TIMs), and card-vending and add-value machines (VAVMs), thereby simplifying spares inventory and management.

To deal with a high volume of passengers who swipe cards or tokens daily to enter and exit stations, the BXP-A100-E2 computer supports 100,000 program/erase (P/E) cycles on a high-performance built-in SSD, thereby enhancing the endurance capability of the storage.

To cope with diverse operating environments and conditions at the metro stations, the BXP-A100-E2 computer comes with a fanless and unique heat-dissipation design to support operations at temperatures -30 to 60°C for long-term stability and reduced maintenance costs.

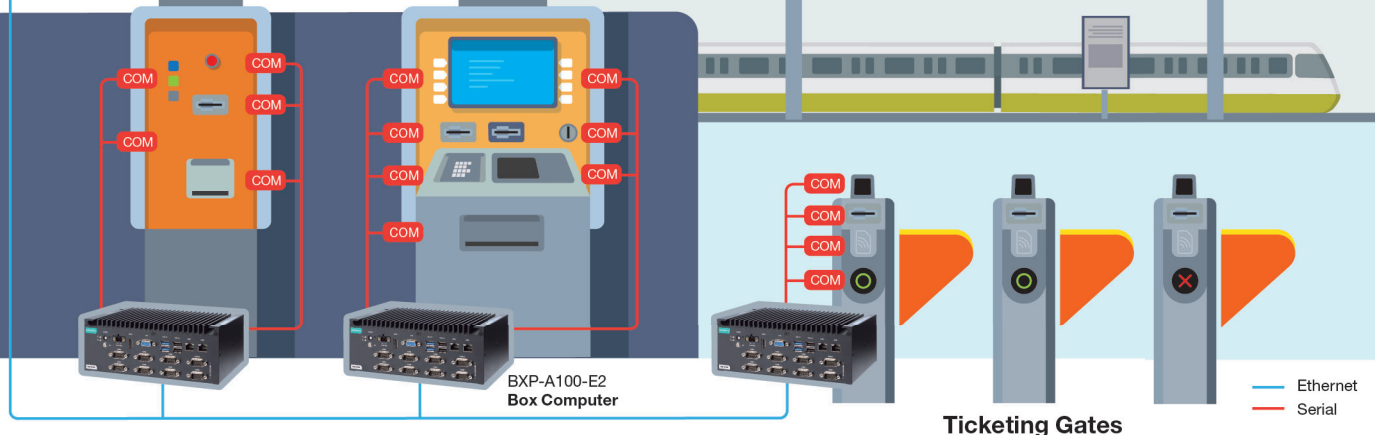


Station Control Room

## Ticket Vending Machines

TIM Token-issuing Machine

VAVM Card-vending & Add-value Machine



## Metro Station

Ticketing Gates

— Ethernet  
— Serial