



Case Study

Ticket Machine for Quick-Cut Salon (MANO310)

Ticket machine boosts efficiency and reduces labor cost for business

Today quick cut salons are popping out on the street corners, shopping malls or even subways stations; they provide fast service while charging at a relatively lower price to compete against fancy high-end salons. In the fast-paced working environment, quick-cut salons usually deploy ticket machines for customers to pay before getting their hair cut and waiting in line. Therefore, the barbers are not bothered by collecting money and making changes, saving labor costs and focusing on providing fast and quality services. A reliable ticket machine is a must-have for quick-cut salons.

Challenges

The quick cut salons offer low price haircuts and quick service. The salon shops are usually small. To reduce costs and increase the efficiency for business operation, easy-to-use self-service ticket machines are necessary. The customer, Imao Technology, is looking for a high-performance yet low power mini-ITX motherboard with a compact size. The motherboard requires rich I/O interfaces to support a thermal printer and currency detectors to collect both bills and coins. Moreover, it needs to support the customer's management software to help the owner to view the daily checkout report.

Main Requirements

- High performance yet low power
- Rich I/O connectivity
 - supports currency detectors
 - supports thermal printer
- Various display output choices
- Management software support
- GbE LAN ports support Wake-on-LAN

About Imao Technology Co., Ltd.

Imao Technology Co., Ltd., headquartered in Taiwan, specializes in developing automated ticket machines for quick cut salons and quick-service restaurants.

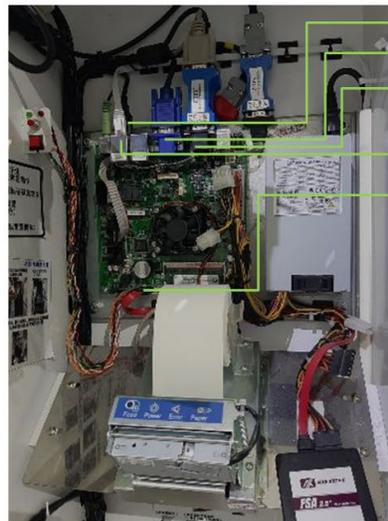
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Axiomtek's MANO310 empowers ticket machines with rich I/O

Axiomtek proposed the MANO310, a mini-ITX motherboard based on the Intel® Celeron® processor N3350. The embedded motherboard has two 204-pin DDR3L-1867 SO-DIMM sockets supporting a total capacity of 8 GB of system memory. It offers one SATA-600 socket and M.2 SSD slot for SATA storage devices. The industrial-grade mini-ITX motherboard features one PCI Express x1 slot and one PCI Express Mini Card slot to enhance its expansion ability. Triple-display capability is available through the HDMI, VGA and LVDS. Also, the MANO310 comes with rich I/O interfaces including six COM ports, four USB 3.0 ports, two internal USB 2.0 ports, two Gigabit LAN ports, and eight-channel digital I/O.



Application: The MANO310 integrates all the components of ticket machine



- USB port connect to the touchscreen
- VGA display output
- 2 COM ports for currency detector (bill and coins)
- GbE LAN port for wired Ethernet
- 64G M.2 SSD

The customer installed the MANO310 in the compact ticket machine for quick cut salon. It is connected to several devices such as a touchscreen for the consumers to select the services of their desire, a bill and coin detector and a thermal printer to print tickets. Moreover, the SBC gains internet access via

wired Ethernet. To store financial data for daily reports, the client has used a 64G SSD.

System Configurations: MANO310

- Intel® Celeron® processor N3350 (code name: Apollo Lake)
- 4GB DDR3L-1600 system memory onboard
- PCI Express Mini Card slot and PCIe x1 slot
- Two LAN, four USB 3.0, and two USB 2.0
- 64GB M.2 SSD TLC onboard
- Two COM ports with bracket
- 12 to 24 VDC
- VGA, HDMI, and LVDS with triple-view supported
- Windows® 10 IoT operating system



*For detailed specifications, please visit www.axiomtek.com or go to Products > Industrial & Embedded Motherboards>Mini ITX Motherboard> for [MANO310](#)

Why Axiomtek

With the MANO310, the customer has successfully developed the ticket machine, which currently has been put into production and has already been deployed in quick-cut salons of a global chain brand.

“Emerging services such as quick cut salons aim to keep up with the fast-paced modern people. We are glad to design this automated ticket machine with Axiomtek. The Intel® Atom™-based MANO310 balances computing and graphics performance to provide an excellent price point. The sales team also provides knowledgeable and resourceful resources to help us with the case. We hope to have the opportunity to work again in the future,” said Guang-Zhong Peng, CEO of Imao Technology Co., Ltd.

About Axiomtek Co., Ltd.

Axiomtek has experienced extraordinary growth in the past 30 years because of our people, our years of learning which resulted in our tremendous industry experience, and our desire to deliver well-rounded, easy-to-integrate solutions to our customers. These factors have influenced us to invest in a growing team of engineers including software, hardware, firmware, and application engineers. For the next few decades, our success will be determined by our ability to lead with unique technologies for AIoT and serve our key markets with innovatively-designed solution packages of hardware and software – coupled with unmatched engineering and value-added services that will help lessen the challenges faced by our systems integrator, OEM and ODM customers and prospects alike. We will continue to enlist more technology partners and increase collaborations with our growing ecosystem who are leaders in their fields. With such alliances, we will create synergy and better deliver solutions, value, and the expertise our customers need.

Axiomtek is a Member of the Intel IoT® Solutions Alliance. A global ecosystem of more than 800 industry leaders, the Alliance offers its members unique access to Intel technology, expertise, and go-to-market support—accelerating the deployment of best-in-class solutions.