

AI-powered Vending Machine/Kiosk

Qualcomm AI Vending machine and kiosk solutions with AI chips including the Qualcomm Dragonwing™ 6490, and the Qualcomm Dragonwing™ 8550 allow manufacturers and AI partners to create smarter, more efficient, and user-friendly machines that enable personalized recommendations, real-time assistance, monitoring, customer analytics, inventory management, and seamless & innovative payments options, tapping into the lucrative and rapidly growing market for AI-powered vending and smart kiosk solutions

What challenge does this solve?

- Friction at retail stores checkout
- Simplifying shopping process
- Delayed assistance
- Decreased operations efficiency
- Enhancing visibility on inventory management & customer analytics

What solution includes

- Qualcomm powered Edge AI boxes powered by Qualcomm Technologies that can connect to non-AI cameras, making them 'smart' to enable computer vision and events monitoring. The camera feeds into the Edge AI box, on which an AI model can run and detect when objects are taken out or put back into the vending machine
- Qualcomm® AI based on-premise compute deployed at facilities to analyze events, and enable alerts and reports locally without any connectivity to external networks
- For other value-added use cases (biometrics payment, age verification, targeted marketing, Loss Prevention, etc.) AI models can easily be integrated on to the Edge AI Box Software and can be operated through simple API calls.
- GenAI-based virtual assistant with multiple languages can also be added by deploying models on the Edge AI Box and integrating them with the Application Software

Qualcomm chipsets

- Qualcomm Dragonwing™ QCS6490/QCM 6490
- Qualcomm Dragonwing™ QCS5430/QCM5430
- Qualcomm Dragonwing™ QCS8550/QCM8550

Target Audience/Applications

Healthcare (Hospital, Pharmacy store), Entertainment & Hospitality (hotel, resort, casino, etc.), Quick service restaurants, Commercial malls, Stadiums, Offices, CPG Companies, Public transport, etc.

Benefit/Key Value Drivers

- Smoother customer experience thanks to reduced friction at checkout
- Reduced cost of operations due to higher operational efficiencies
- Potential for added-value use case: biometrics payment, age verification, gen-AI based features, targeted marketing, GenAI virtual assistant, etc.
- Real-time & immediate assistance in multiple languages to reduce interaction disruption
- Enhanced visibility on inventory management
- Improved customer analytic
- AI capable of running on-premise for secure and private operations
- Real time operations monitoring based on tailored AI models

Use case examples

- | | |
|---|------------------------------|
| • Grab & go | • Automatic age verification |
| • Loss prevention | • Biometrics payments |
| • Real-time assistance | • Inventory management |
| • Personalized shopping experience targeted marketing | • GenAI virtual assistant |
| | • Customer analytics |

