

IEI

A Software Leap for IEI CAYIN Powers ePaper Pairing and Management

BRIEF PROFILE

Place: Taiwan

Industry: Enterprise

Solution:

- E-Paper
- Custom Solution

IEI ePaper pairing and management software is a pair of applications, ideaPairingX and ideaRoomX, that CAYIN developed for IEI Integration Corp. Users pair ePaper displays to the network from a phone or tablet, and administrators dynamically push meeting schedules and room status to every display from one place.

Insight

ePaper delivers a true paper-like viewing experience with ultra-low power consumption and minimal operating costs.



ePaper displays paired and updated through IEI and CAYIN software, shown here as menu boards in a cafe store.

CAYIN and IEI bring centralized management to ePaper displays

CAYIN developed ideaPairingX and ideaRoomX for IEI, so ePaper displays can be set up from a phone or tablet and managed from one place, with meeting and room information updated dynamically.

In the industrial computing and embedded systems space, IEI Integration Corp. needs no introduction. For over three decades, from industrial motherboards to AIoT solutions, IEI has powered the computing backbone of healthcare, manufacturing, retail, and transportation. Customers around the world learned one thing along the way: IEI products are stable.

But rock-solid equipment meeting a fast-moving display market still left one piece missing. When IEI set out to enter the ePaper display market, a new question surfaced. Even the best equipment falls short of being called smart if managing a large number of ePaper devices requires an engineer with a laptop on site, and pushing content means touching every unit by hand.

The real challenge went beyond simply getting online

As ePaper displays moved into offices, meeting rooms, and smart spaces, IEI faced a challenge common to many hardware makers.

Management had to be effortless: End users are not IT engineers and do not carry a laptop around, so setting up and managing a device needed to work with nothing more than a phone, the way pairing Bluetooth headphones does.

Push had to scale: Meeting rooms and office spaces often run dozens to hundreds of nodes, and content updates could not depend on manual work per device.

Information had to stay current: Meeting schedules and room status change constantly, and any lag on the display becomes a lag in trust.

IEI partnered with CAYIN Technology to meet these demands, drawing on CAYIN's deep expertise in digital signage software to co-develop two purpose-built applications.

| Two steps: one to pair, one to push | ideaPairingX the first minute of setup

ideaPairingX handles device pairing and network configuration right from a phone or tablet. Users open the app and connect ePaper displays to Wi-Fi and gateways in just a few taps. One person with one phone can bring an entire batch of devices online, which lowers the bar for on-site deployment and IT management.

ideaRoomX every moment after

ideaRoomX centers on content push and management. It dynamically delivers information such as meeting schedules and room status to distributed ePaper nodes, keeping every screen in sync with minimal delay.

Together, the two applications form a complete workflow from device onboarding to content delivery, giving IEI's ePaper product line a software experience built for real deployments.



The results, a brand gains a software edge

Lighter deployment: Device management moved from engineer-dependent, on-site work to something handled remotely from one place.

Less management effort: Updating content across large node counts moved from device-by-device work to centralized push.

A more complete product: IEI's ePaper equipment grew from a great panel into a complete solution.

Lessons for brand display equipment: a good product needs software that understands its user

1. Start from the user's first minute, not from the spec sheet.
2. Pairing and push are two different tasks, each worth solving with dedicated software.
3. Hardware stability only shows its full value when paired with equally stable software.

Thank You for Your Trust, IEI

CAYIN Technology thanks IEI for its trust and for the opportunity to extend our digital signage software expertise into ePaper applications. The collaboration reflects CAYIN's growing track record in building software for hardware partners, and we look forward to deepening it for smarter office and smart space display solutions.

CAYIN Technology in Brief

CAYIN Technology offers a complete portfolio of digital signage solutions - including media players, servers, and software — that are applicable to various industries, such as education, retail, hospitality, corporate, financial, and public institutions. CAYIN is dedicated to being a reliable partner to its clients worldwide and has successfully set up various application references globally. In order to best facilitate the deployment of CAYIN products, the company also provides tailored services to satisfy the ascending market demand for almost limitless applications.



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