No.1 Cloud-based Unmanned Parking Control System 'EYEVACS™'
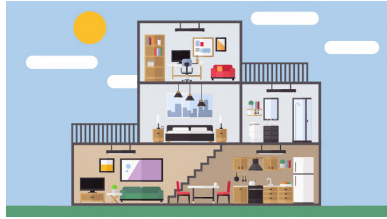
Company Overview

2024-03-29

Silicon Bridge, Inc.
클라우드 무인주차관제 "아이박스"

Intelligent Vehicle Access Control System

Providing cloud AI integrated platform solution service for collective buildings and Parking Lots.

In 2016, Silicon Bridge provided IoT parking control, access control, parking guidance, and app/web services on an AWS cloud-based platform specialized for collective buildings for the first time, and registered 8 related technology patents in Korea. In addition, as the first mover of the future AI parking lot, we are developing equipment and software for the operation of a completely unmanned parking lot, such as car exterior damage auto detection, car operation information, maintenance, parking lot data provision, and vehicle information linkage user app service when entering and exiting the parking lot, which is the hub of autonomous vehicles.

For the parking lot of the future collective building, which will be responsible for the departure and arrival of all vehicles in the era of autonomous driving, Silicon Bridge has been preparing for the past 8 years. In 2016, we launched the first cloud-based unmanned parking control system "EYEVACS-intelligent vehicle access control system" in Korea, and EYEVACS has been installed and operated in Everland resort, Legoland resort, Home plus shopping mall, Mercedes-Benz Service Center, LG Uplus HQ, and more than 344 apartments and parking lots nationwide.

By 2024, we will expand cloud AI unmanned parking lots by installing EYEVACS in 1,000 apartment complexes nationwide, and we will expand the EYEVACS v4 integrated unmanned parking control and unmanned access control system to collective buildings and public buildings. In addition, we plan to participate in the exhibition "ISC WEST 2025" in the United States as a cloud AI parking platform for unmanned autonomous vehicles, and we've signed the contract for exporting EYEVACS to the US market in Mar. 2024. Also, we have an engagement for construction site of NEOM City in Saudi Arabia with our sales partner.

Silicon Bridge was founded by engineers who have been designing system on chip semiconductors for domestic and foreign companies for more than 20 years, and is a specialized technology venture company with cutting-edge technologies that encompass computer vision, AI, IoT, embedded systems, cloud servers, and app/web programming.

By combining new market-leading product planning and system semiconductor design technologies, we will provide the most outstanding products and platform services to the domestic and global markets by installing cloud platform software on top of one-board/one-chip technology and hardware with price competitiveness.

CONTENTS

01 The advent of the era of unmanned autonomous driving

Paradigm shift in the parking control environment - Need for a next-generation parking control platform that can respond to the > changed environment

The market predicts that Level 4 or higher autonomous driving will be commercialized around 2030. Boston Consulting Group (BCG), a strategy consulting firm, predicted that fully autonomous driving could be commercialized around 2035, and R&D costs of about 59 trillion won would be required by then. The South Korean government has put forward a plan to commercialize fully autonomous vehicles at the level of 'Level 4' that do not require driver intervention by 2027, and to increase the penetration rate of new cars with autonomous driving functions to more than 50% by 2035.
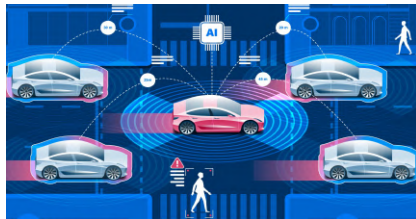
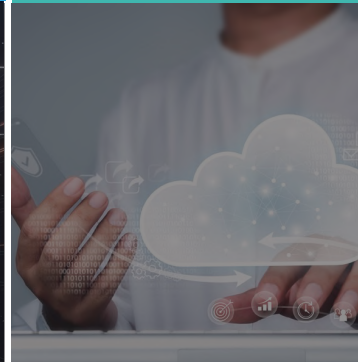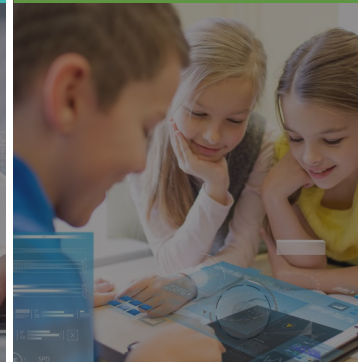| Unmanned vehicle management autonomous parking lot | Mobile Integrations | Real-time AI information processing | Cloud integration for all parking lots | Providing a variety of platform services |

02 Development of cloud-based AI autonomous parking control platform

The key to the future parking industry, represented by autonomous driving, is to secure connectivity. The cloud-based unmanned autonomous parking control platform can be developed into various businesses with accumulated big data by linking offline parking spaces and vehicle data that have been isolated by individual units in real time.

It will be possible to provide various additional services such as integrated management (appearance/operation information/vehicle status/automatic charging) of autonomous vehicles returning from operation and sharing information between parking lots to guide vehicles in operation to the most suitable parking lot.
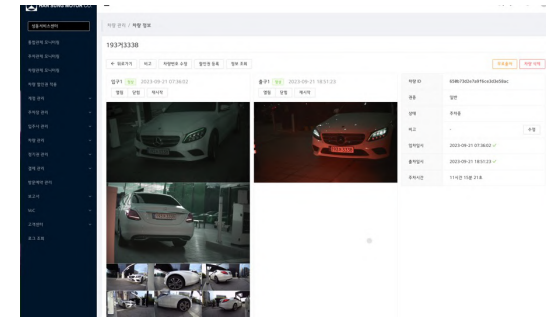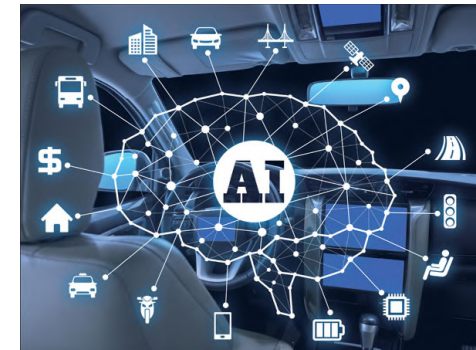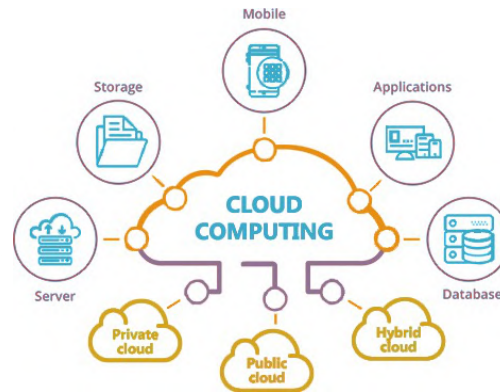
- Vehicle number recognition and unmanned entry control through AI deep learning camera -> cloud service linkage
- Automatic vehicle appearance inspection and processing data transmission through AI deep learning engine -> cloud service linkage
- Completely unmanned operation: Unmanned kiosk / Unmanned fare settlement system / Cloud remote control service

From the launch and operation of Korea's first cloud-based unmanned parking control platform in 2016,
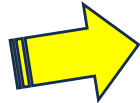By 2026, Silicon Bridge will lead the market in autonomous AI parking platforms.

Step 3 (2026 ~)

Cloud AI Parking Lot

- Autonomous vehicle interlocking unmanned parking lot
- Automatic Vehicle Appearance Condition Inspection (AI Analysis)
- Automatic vehicle driving status check (wireless linkage)
- Real-time parking lot status cloud service
- Linking the mobility platform and the parking lot
- Integrated unmanned parking lot remote automatic management
- Parking lot-related mega app platform service

Step 2 (2022 ~)

AI-based vehicle appearance management

- For the first time in 2022, Mercedes-Benz Han sung Motor cloud-based exterior vehicle management system application and operation (photos, videos)

Step 1 (2016 ~)

Cloud platform-based unmanned parking lot

- In 2016, Cloud-based Unmanned Parking Control system "EYEVACS" was launched with unmanned kiosk for visitors self registration and provided visiting reservation through the smartphone app for the first time
- Cloud-based parking control without a local PC
- Supplied to Kakao Mobility, LG S&I, Hanwha Vision
- Development of parking control system integrated control board
- Parking Control/Parking Guidance/Entry Control/Service

=> Step 4 : Global Cloud AI System
Standardize solutions and provide WW services

04 Providing cloud-based integrated platform services specialized for apartments

In 2016, Launched Korea's first cloud-based unmanned parking control platform (unmanned kiosk, vehicle number reader, cloud web/app)
In 2024, Korea's first integrated platform service for parking control/entry control/parking guidance/CCTV/apartment-specialized services.

In 2016, Silicon Bridge launched its first cloud-based unmanned parking control platform and system to target the apartment market. (EYEVACS v1.0)
Through the EYEVACS unmanned parking control platform, residents naturally installed an app exclusively for residents, and through the app, they could conveniently use visit reservations, occupancy notifications, delivery notifications, parking notifications, and visitor management services that were not available before. Through a new cloud server-based admin page and user app service, the management office experienced systematic vehicle statistics and unmanned parking control, and the congestion situation of the apartment parking lot, which was in difficulty, was improved and began to be conveniently managed.
Since the initial service launch, there have been 4 new equipment and software improvements in the past 8 years, and in addition to the unmanned parking control system, a cloud-based unmanned access control system has been developed and launched.
We have launched Korea's first apartment-specific "EYEVACS 4.0 Integrated Platform Service in 2024.
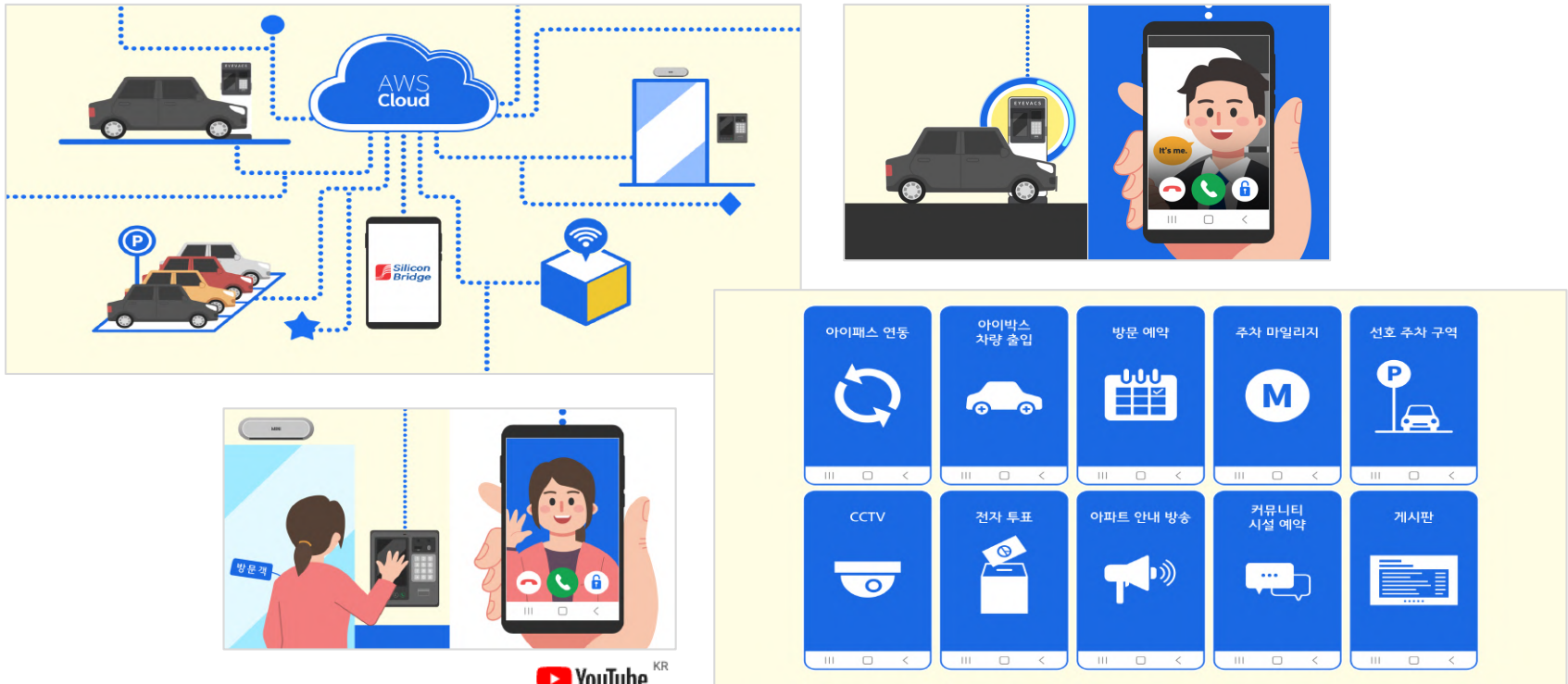
"The equipment has been broken-less for a long time,
The cloud program is always up-to-date,
Maintenance can be done remotely at any time.
One wise choice will determine the 10 years of your
convenient life in apartment!"

Company Overview

Silicon Bridge is covering from product development to production, construction, and post-management in One-Stop operation.
We provide optimal unmanned parking control, unmanned payment system, access control and parking guidance solutions for each site such as apartments, paid parking lots, and knowledge industry centers nationwide.

Silicon Bridge

01 General Status of Silicon Bridge

Cloud AI Platform Solution Leader

Company Name	Silicon Bridge, Inc.	CEO	Taeho Kim
Establishment	October 19, 2015	Capital	344 million won
Employees	25 (2024.03)		
Business area	Parking Control Equipment, Access Control Equipment, Electronic Products, Semiconductor and Electronic Components, Electronic Integrated Circuit Design		
Main Products	• Korea's first cloud-based 4th generation unmanned vehicle number recognition parking control system EYEVACS • Cloud-based unmanned auto payment system EYEPAY • Cloud-based unmanned access control system EYEPASS • Cloud-based integrated platform web/app service specialized for apartments (EYEVACS Ver4.0)		
History	• 2015.10. Establishment of the company • 2019.10. Capital increase (Capital: KRW 300 million) • 2020.02. Seongnam Headquarters Expansion and Relocation		
Address	SK V1 Tower 731-ho, 807-ho, 14 Galmachi-ro 288beon-gil, Jungwon-gu, Seongnam-si, Gyeonggi-do, Republic of Korea (13201)		
Website	www.siliconbridge.co.kr / www.eyevacs.com		
Phone #	+82 31 606 8880		
Email	sales@siliconbridge.co.kr		

02 Corporate Identity
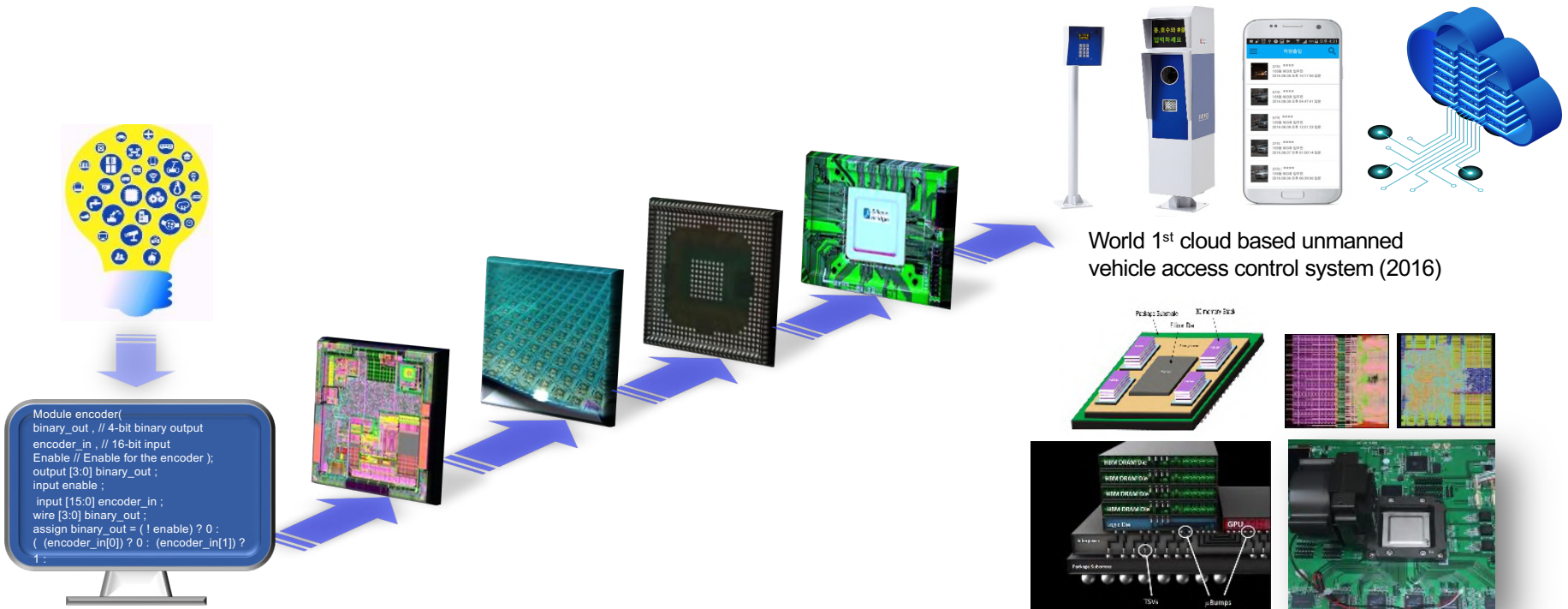
```
Module encoder(
binary_out , // 4-bit binary output
encoder_in , // 16-bit input
Enable // Enable for the encoder );
output [3:0] binary_out ;
input enable ;
 input [15:0] encoder_in ;
wire [3:0] binary_out ;
assign binary_out = ( ! enable) ? 0 :
( (encoder_in[0]) ? 0 : (encoder_in[1]) ?
1 :
```

World 1st cloud based unmanned vehicle access control system (2016)
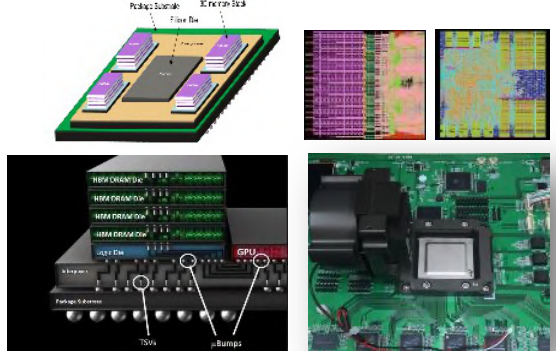
HBM Gen1 2.5D SiP Test Chip (2015) : SKHynix, GF 28nm

시스템 반도체 설계
Spec to Chip – RTL design, F/E design, B/E design
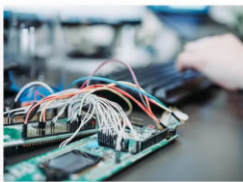
사물인터넷 및 하드웨어
IoT device & System design, Embedded S/W

클라우드, 웹·앱, 소프트웨어
AWS based cloud programming, Web programming, Android/IOS App Software

주차관제 유도 시스템, 공동현관 클라우드 인터폰
Cloud based intelligent Vehicle Access Control System, Cloud based Smart Lobby Phone.

Enable your IDEA To ASIC

ASIC Design experience : 27+ ASIC Design ; 15+ Mass productions
Physical Design experience : 90+ Tape out ; 60+ Mass productions

We connects various product lines based on the Internet of Things with the cloud platform and connects them back to the user's smartphone to create a convenient lifestyle.

03 Korea's first cloud-based unmanned parking control and entry control system

Based on more than 20 years of system semiconductor design technology, unmanned parking control/access control Field Innovation capabilities are integrated!

Approaching existing markets from a new perspective, faster execution and convergence of technologies from other fields

- Establishment and operation of Korea's first cloud-based unmanned parking control/auto payment system
- Applied and operated Korea's first QR code discount ticket for unmanned auto payment system
- Establishment and operation of Korea's first unmanned parking control system and visit reservation system through app
- Developed and operated Korea's first cloud-based unmanned auto payment machine
- Korea's first unmanned parking control/auto payment system SaaS (Software as a Service) service
- A total of 8 technology patents and 3 design patents registered

Korea's first cloud-based entrance lobby phone and smart one-pass

Korea's first cloud-based administrator web and user app service

Cloud-based unmanned parking control/auto payment system that does not require a local server PC on site

04 Total Cloud Platform Service

EYEVACS / EYEPASS Equipment

Unmanned parking control/auto payment/entry control/parking guidance system

Cloud Program

Amazon Web Service

EYEVACS Parking Admin Program

EYEVACS Parking Admin Program on AWS Cloud

App/Web Services

Apartment/Paid Parking Manager Web, User App
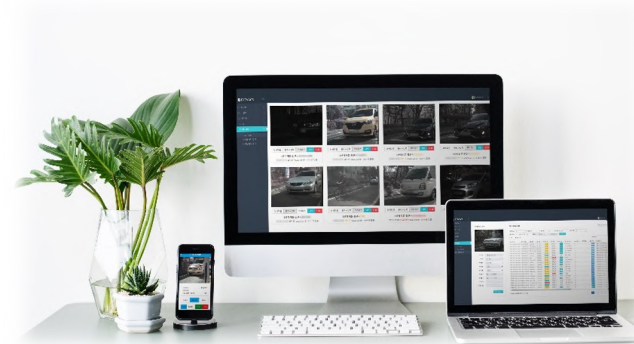
05 Mobility-specialized next-generation interlocking service

AI-based automated visual inspection service is linked with cloud platform
: Providing B2B and B2C services in various fields such as car repair services, insurance companies, shared car services, private vehicles, and car rentals

Hansung Motors (Benz) Sungdong Service

- Our platform is in operation (2022~)
- 4K camera exterior shooting & recording
- Cloud-based unmanned parking control
- Vehicle number recognition linkage (vehicle search)
- Magnified screen, video clip playback

4K JPG

4K MP4

Based on the data collected in the field through the 180-degree 4K camera, we are preparing training data for appearance inspection and developing AI appearance inspection algorithm
=> Scheduled to be applied on-site in 2024

06 Installation site – Apartment Parking Control (205)

From the first site 'Cheongdam Daewoo Euro County' in 2016 to the 'Sinnae 4 Complex in Jungnang-gu' as of the end of February 2024, there are 205 major apartment complexes across the country.
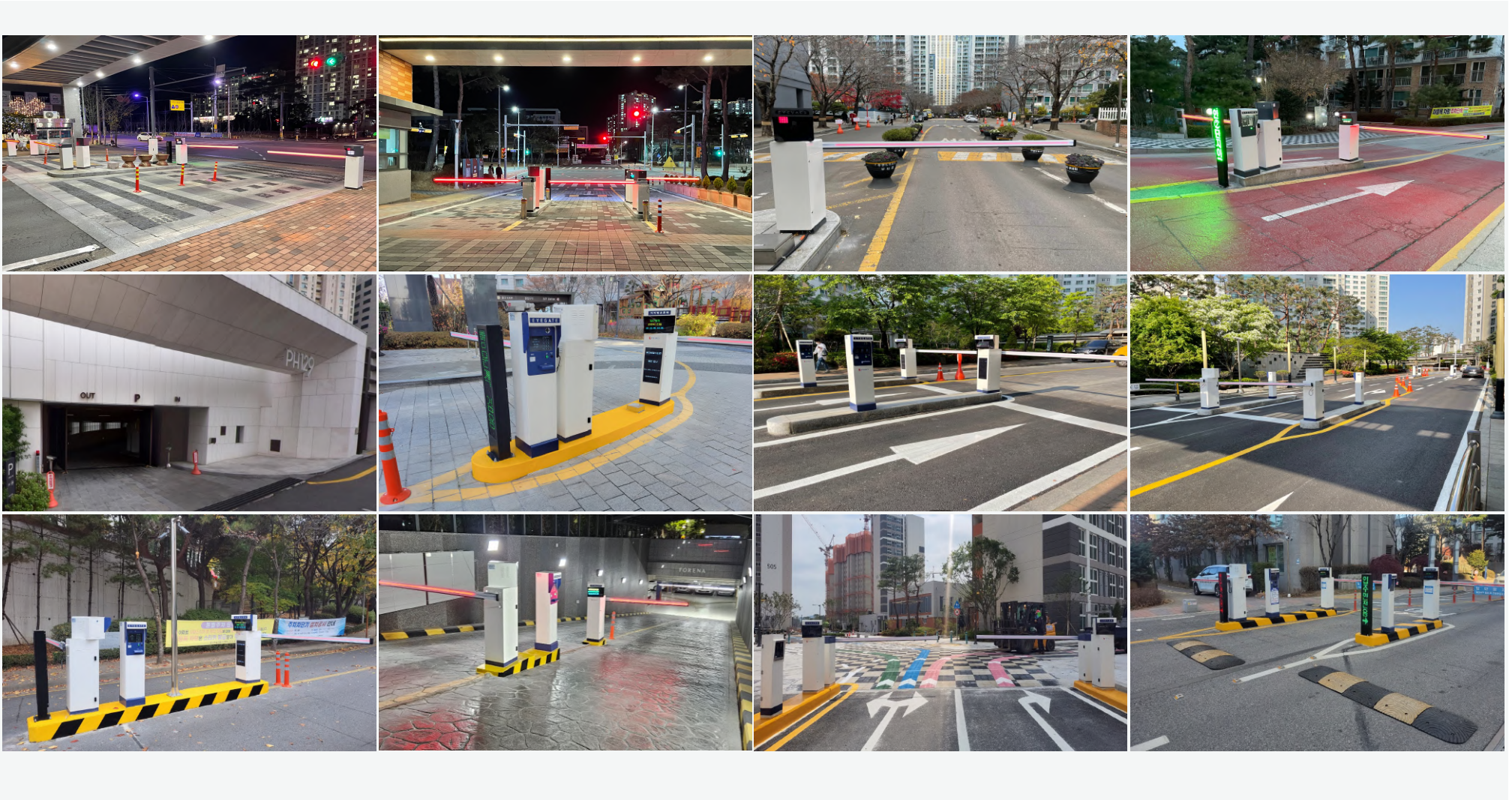
07 Installation Site – Apartment Access Control (7)

Seven apartment sites in the metropolitan area and Busan are operating as an EYEPASS access control apartment platform. (As of February 2024)
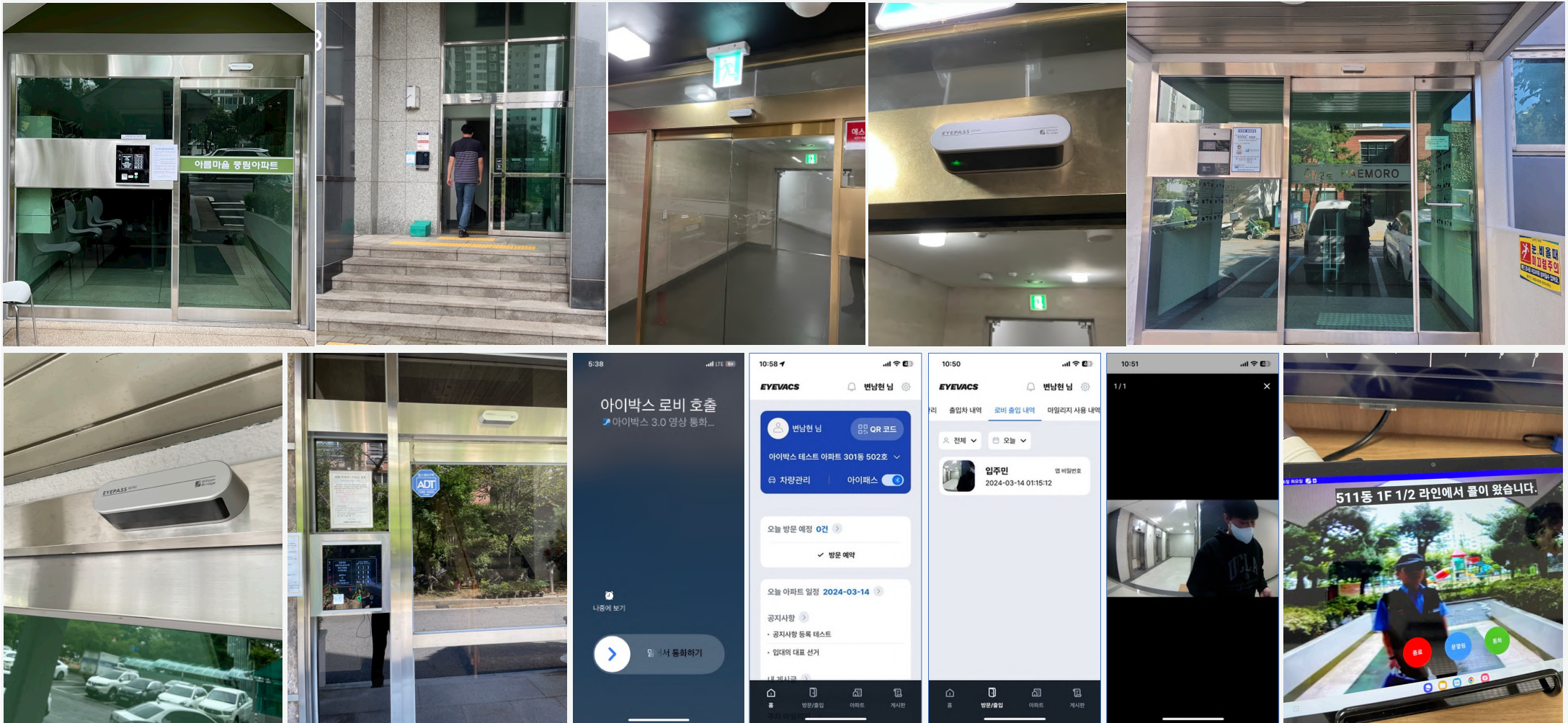
08 Installation site – paid parking lot (132)

132 sites nationwide, including Yongin Everland, Chuncheon Legoland, LG Group (affiliated building), Hansung Motors, Homeplus, Knowledge Industry Center, and traditional markets, are operating with the i-Box parking system. (As of February 2024)
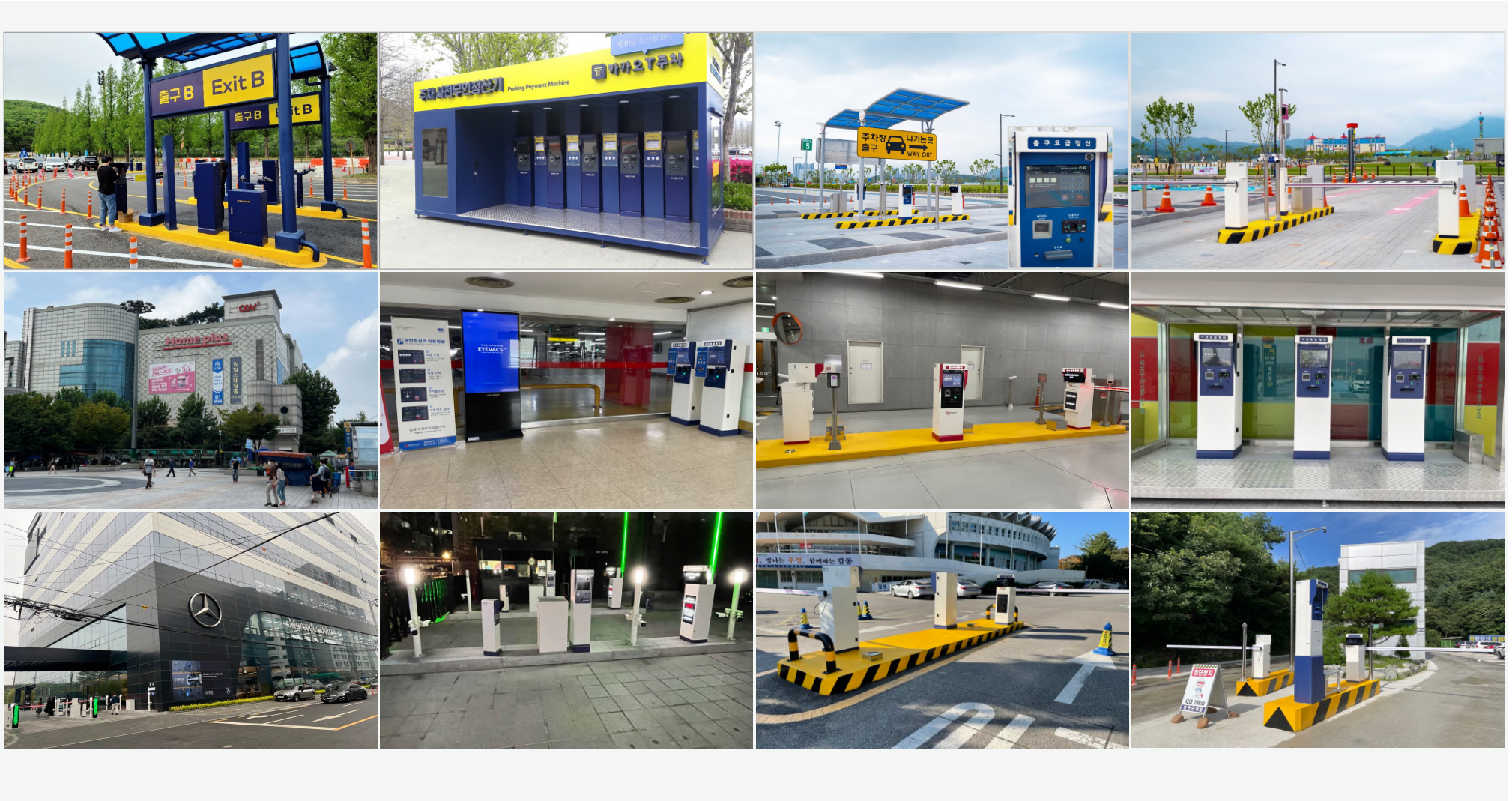
09 Next-generation cloud unmanned parking control platform competitiveness comparison

Cloud-based global service, securing original technology for parking control/entry control/cloud web/app program, utilizing AI artificial intelligence system semiconductor chip design technology, and securing global platform competitiveness for next-generation cloud AI unmanned parking control

Global Coverage

Operable Structure in IDC and Cloud Environments

Global Cloud Operations and Cost Optimization

Remote System (Device) Management

Securing original technology

System semiconductor chip design technology

Unmanned Parking Control System HW/SW Technology

Parking Control One Board system

AI-powered services

Generative AI service based on cloud customer data

Customized service through big data processing

Competitiveness of Silicon Bridge

	Silicon Bridge	Domestic Company A	Domestic P Company	Overseas F Company
Cloud Services	O	X	△	O
Parking control integrated platform	O	X	X	O
Remote System Management Skills	O	O	O	O
System Semiconductor Technology	O	X	X	X
Parking control source technology	O	O	X	O
Parking Control One-Board System	O	X	X	X
Cloud Data Management	O	X	△	O
Smartphone integrated app	O	X	△	△

Development of global standardization system for unmanned parking control (B2B SaaS service)

10 Three Advantages of Silicon Bridge Service

Simplifying parts

- AI-based license plate recognition
- Single Integrated Control Board
- Cloud-based administrator SW
  (No need for a local PC)
- Securing competitiveness in product supply unit
- A new concept of entry control system

Remote Maintenance
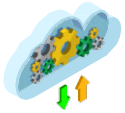
- Establish a remote maintenance environment (95%)
- Cloud-based full on-site management program
- Minimizing maintenance personnel

User Apps. Services

- Parking control, access control, parking induction, and provision of specialized services for apartments
- Per-user paid service payment options
- Operation of an advertisement posting site where local advertisers can directly post advertisements

Build your solution

Maintenance Service

Managed Service

11 Amazon Cloud-Based Server Configurations- EC2, Fargate, Micro Service Architecture
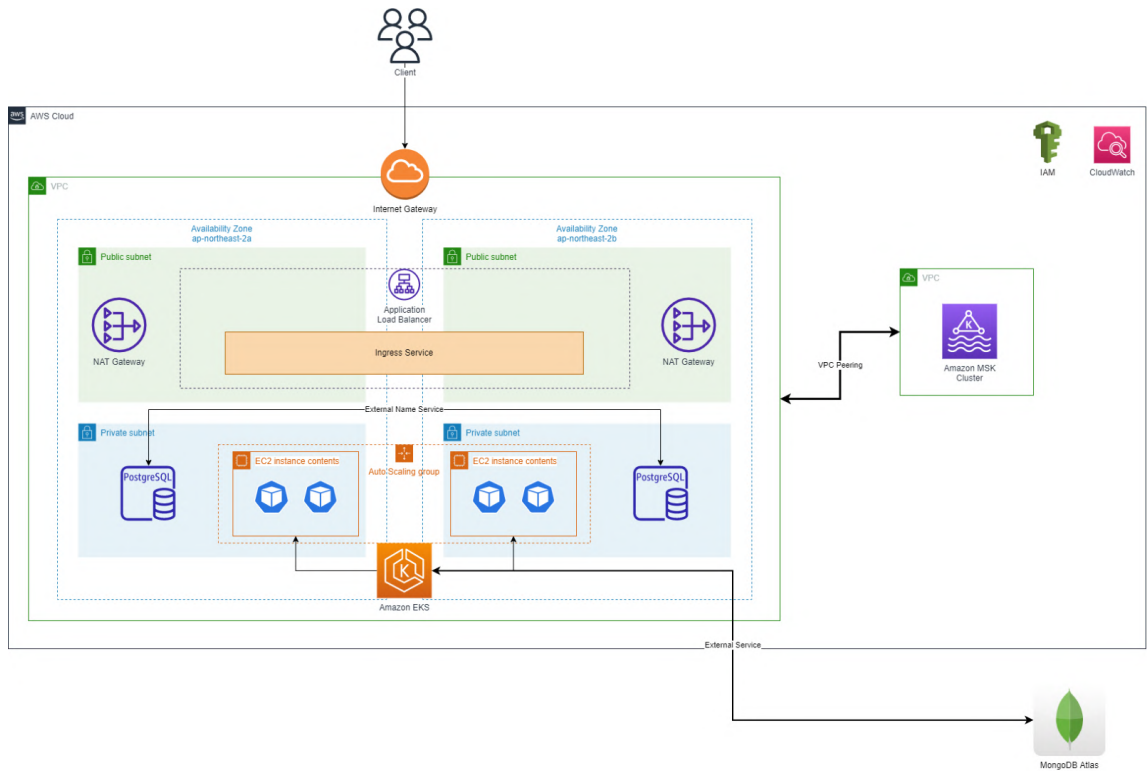
- AuthN Service
  - administrator Account administration
- User Service
  - app user Account administration
- Apartment Service
  - Apartment Management
- Device Service
  - Access Management, Appointment Management, Fleet Management, Equipment Management

- Reservation Service
  - Manage Facility Reservations
- Forum Service
  - Community Facility Management, Civil Complaint Management, Bulletin Board Management
- Vote Service
  - Electronic Referendum
- Patrol Service
  - Patrol Service Management

- Admin Frontend
  - Administrator Web

- PostgreSQL DB
- MongoDB
- MySQL DB

12 Amazon Cloud-based Server Management and Deployment
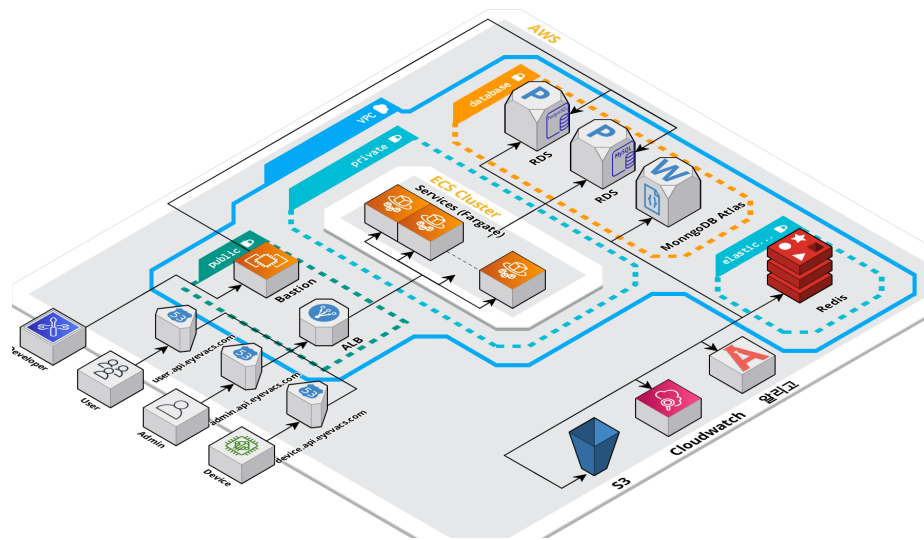
- Service segregation due to MSA architecture
- VPC Network Separation (public, private, DB)
- Access and operation of DB network through Bastion server
- Domain segregation by user
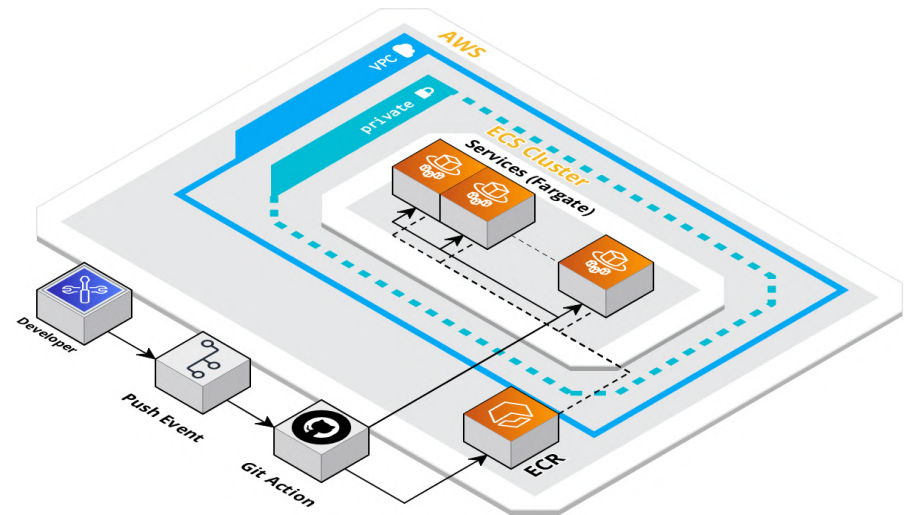
- Git repository Push Event automatically deploys by production environment
- After deploying the ECR image, rerun the ECS service
- Blue/Green deployments enable non-disruptive service deployment

13 User app– CodePush

Deployment that used to take 1~3 days
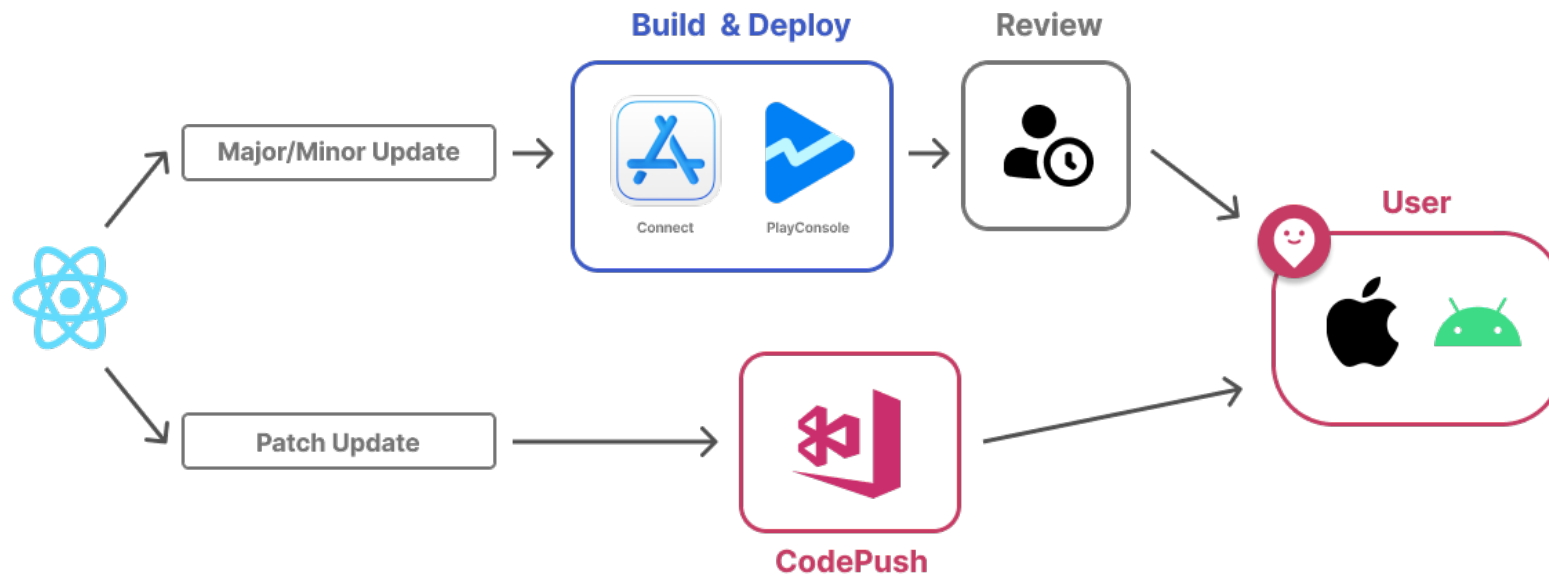
Distribute apps to users in 1 minute, automatic updates

Conventional parking control system configuration (third-party example)

Silicon Bridge Premium All-in-One License Plate Number Reader (AIO4P)

Third-party license plate number reader configuration: PC for vehicle number recognition (1) + vehicle number reader camera, lighting, control board (2) + vehicle circuit breaker (3)
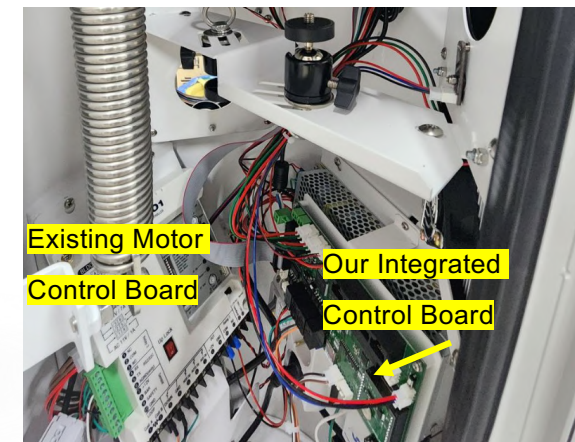
Our license plate number reader configuration:
Left (1), (2), (3) All-in-One
Internal components are also simplified with cameras, lighting and control boards

Existing Motor Control Board

Our Integrated Control Board

Aiming to launch in early 2024, the company's integrated control board

The entire parking control system up to the existing motor control board

Developing a single integrated control board for parking control that can be controlled

=> Later function block designed and applied with its own chip

15 Possess an AI-Deep Learning based vehicle number recognition engine

AI-based license plate recognition engine

- OCR-based ART2 engine (99.6% recognition rate)
- AI-based Deep Learning engine (99.9% recognition rate)
- Application of 500,000 license plate number training data through government data voucher task

지역	인식률	테스트한 장수	구분차량수	차량 출입수
서울	73	126	268,482	2,211,139
경기	80	110	165,128	2,627,109
인천	76	86	46,020	711,530
대구	84	94	9,645	81,914
경남	74			
경북	50			
부산	50			
강원	85			
세종	82			
충남	84			
광주	95			
대전	56			
충북	92			
전북	73			
전남	78			
울산	51			
제주	71			

Keyword=["울산", "경북"…

(1) Data Screening and Preprocessing
Selecting low-accuracy keywords

울산80사5154
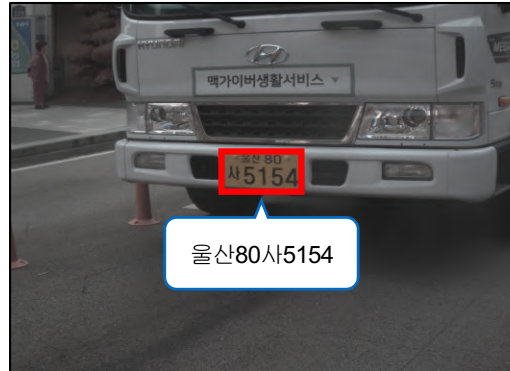
(2) Data processing
🟥 : Bounding Box processing
🟦 : Classification processing

울산80사5154   울산80사5154

1|울산80사5154|320 100 85 38
2|서울62가3123|450 126 65 23
3|대전10아4456|600 223 33 12
…
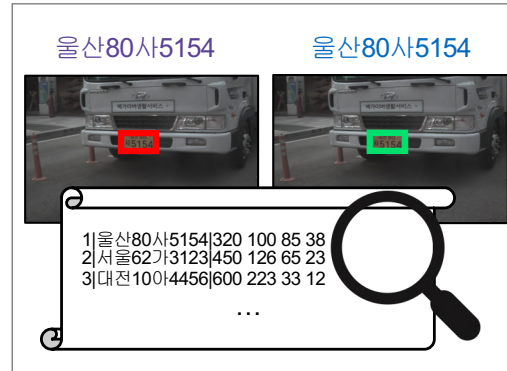
(3) Data Inspection
Original data Inspection against any refined data
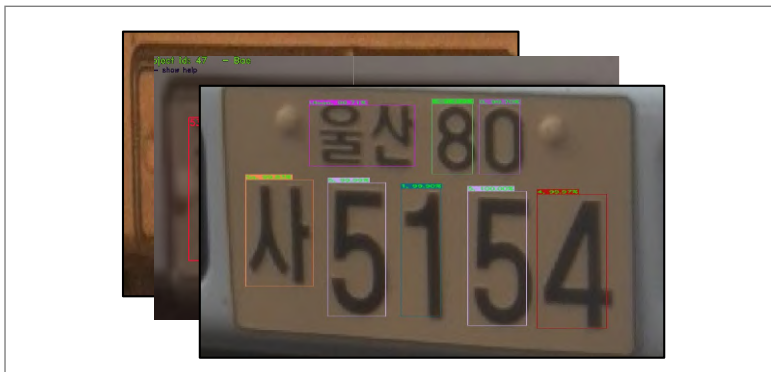
(4) Deep Learning Model Training
Labeling with deep learning model training

1차 수정
2차 수정
3차 수정
…
M차 수정
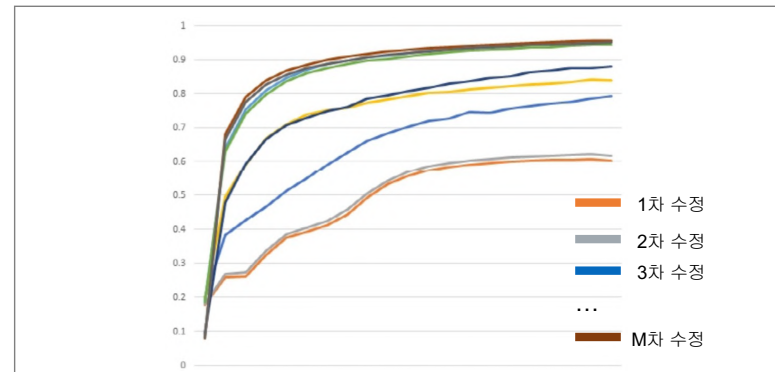
(5) Accuracy inspection and deep learning model modification
Accuracy increases with each training iteration at low recognition rate

16 Technology Patent Registration Status

Cloud unmanned parking control, access control, electric vehicle charging, village broadcasting-related technology patent registration 8 patents, 1 application completed (2024.01), 3 design patents registered

2015 -> 2016

2016 -> 2017

2017 -> 2018

2018 -> 2019

2020 -> 2022

2021 -> 2022

2022 -> 2022

2023 -> 2023

17 Featured Partners

We are doing our best in sales, installation, and after-sales service through close cooperation with more than 15 partners in addition to the nationwide distributor silicon hub as well as cooperation with large domestic companies.

Kakao Affiliates	Samsung Affiliates
kakaoT	SAMSUNG 에스원

LG Affiliates	Hanwha Affiliates
S&I Corp.	한화비전

Dasan Affiliates
DASAN 카이스
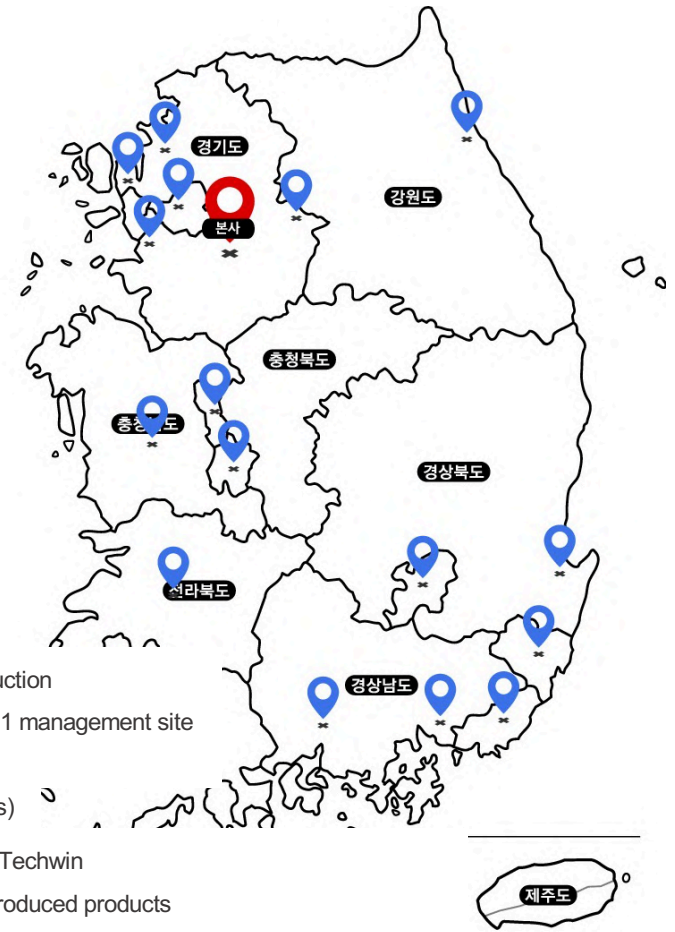
2019 | Development partnership with Kakao Mobility, Mass Production

2020 | Delivered Kakao T parking control products to Samsung S1 management site
        LG S&I Parking Facility ODM and Mass Production

2021 | LG S&I Win-Win Cooperation Project (Additional Progress)

2022 | Signed R&D project and supply cooperation with Hanwha Techwin
        | Hanwha Vision started supplying 'Smart Parking' mass-produced products

2023.12 | Registered as a Tier 1 partner of S1 Parking Control System (Secured nationwide sales network)

경기도
강원도
본사
충청북도
충청남도
경상북도
전라북도
경상남도
제주도

Product Line-up

1. Unmanned Vehicle Access Control System
2. Unmanned Entrance Control System
3. Ultrasonic Parking Guidance
4. Video Parking Guidance, CCTV, NVR

01 Unmanned Parking Control/Auto Payment System

- Cloud-based unmanned parking control EYEVACS v4.0 released

In 2024, the 4th generation EYEVACS has launched

; premium products and competitive prices

EYEVACS AIO4P

Premium All-in-One License Plate Number Reader (SBI-LPR007AIO4P)

Cloud AI-based Unmanned Vehicle Access Control System "EYEVACS v4"

- High-performance all-in-one license plate number reader equipped with a vehicle number recognition AI camera and a single integrated control board
- User-customized information delivery function through the bottom display board (design patent registration)

Main Function (LPR)	Max 3M Pixels CMOS Color Global Shutter IP Camera
	Custom IR Strobe B/D
	Integrated Control B/D : Camera, LED display, Relay, IR, 4CH SW (10/100 Ethernet) control
	Top LED Signage: 128 x 64 Pixels, 7 Colors
	50W Dual Output SMPS
	45 degrees head rotation - left and right
	Built-in license plate number recognition engine
	Network connection to server (Cloud or Local)
Main Function (Barrier)	Bottom LED display: 128 x 256 pixels (7 Colors, Configuration via Admin Web.)
	BLDC Motor Control B/D
	Motor Specification : BLDC 100W (24VDC)
	Robust mechanism for long lifetime.
	Barrier Bar : 3m basic (double-sided LED lighting)
	Loop detector : 2 channels
	Remote Power Control
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (130W power consumption)
	Size (mm) : 325(W) * 560(D) * 1410(H)
	Weight: 55Kg

EYEVACS AIO4

All-in-one license plate number reader(SBI-LPR007AIO4)

Optimum version of All-in-One LPR

- High-performance all-in-one license plate number reader equipped with a vehicle number recognition AI camera and a single integrated control board
- No additional LED display signage in bottom area

Main Function (LPR)	Max 3M Pixels CMOS Color Global Shutter IP Camera
	Custom IR Strobe B/D
	Integrated Control B/D : Camera, LED display, Relay, IR, 4CH SW (10/100 Ethernet) control
	Top LED Signage: 128 x 64 Pixels, 7 Colors
	50W Dual Output SMPS
	45 degrees head rotation - left and right
	Built-in license plate number recognition engine
	Network connection to server (Cloud or Local)
Main Function (Barrier)	
	BLDC Motor Control B/D
	Motor Specification : BLDC 100W (24VDC)
	Robust mechanism for long lifetime.
	Barrier Bar : 3m basic (double-sided LED lighting)
	Loop detector : 2 channels
	Remote Power Control
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (130W power consumption)
	Size (mm) : 325(W) * 560(D) * 1410(H)
	Weight: 52Kg

EYEVACS LPR4P

Premium License Plate Number Reader (SBI-LPR007LPR4P)

Premium version of LPR

- High-performance all-in-one license plate number reader equipped with a vehicle number recognition AI camera and a single integrated control board
- Additional LED display signage in bottom area

Main Function (LPR)	Max 3M Pixels CMOS Color Global Shutter IP Camera
	Custom IR Strobe B/D
	Integrated Control B/D : Camera, LED display, Relay, IR, 4CH SW (10/100 Ethernet) control
	Top LED Signage: 128 x 64 Pixels, 7 Colors
	50W Dual Output SMPS
	45 degrees head rotation - left and right
	Built-in license plate number recognition engine
	Network connection to server (Cloud or Local)
	Bottom LED display: 128 x 256 pixels (7 Colors, Configuration via Admin Web.)
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (130W power consumption)
	Size (mm) : 325(W) * 560(D) * 1410(H)
	Weight: 45Kg

License plate number reader (LPR4)

EYEVACS LPR4

License plate number reader(SBI-LPR007LPR4)

Optimum version of LPR

- High-performance all-in-one license plate number reader equipped with a vehicle number recognition AI camera and a single integrated control board
- No auto barrier

Main Function (LPR)	Max 3M Pixels CMOS Color Global Shutter IP Camera
	Custom IR Strobe B/D
	Integrated Control B/D : Camera, LED display, Relay, IR, 4CH SW (10/100 Ethernet) control
	Top LED Signage: 128 x 64 Pixels, 7 Colors
	50W Dual Output SMPS
	45 degrees head rotation - left and right
	Built-in license plate number recognition engine
	Network connection to server (Cloud or Local)
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (50W power consumption)
	Size (mm) : 325(W) * 430(D) * 1310(H)
	Weight: 40Kg

EYEVACS LPR4LP

License plate number reader (SBI-LPR007LPR4LP)

Compact size stand-alone license plate number reader

- High-performance all-in-one license plate number reader equipped with a vehicle number recognition AI camera and a single integrated control board
- A newly designed license plate number reader with a vertical display at the bottom

Main Function (LPR)	Max 3M Pixels CMOS Color Global Shutter IP Camera
	Custom IR Strobe B/D
	Integrated Control B/D : Camera, LED display, Relay, IR, 4CH SW (10/100 Ethernet) control
	LED Signage: 64 x 128 Pixels, 7 Colors
	50W Dual Output SMPS
	Built-in license plate number recognition engine
	Network connection to server (Cloud or Local)
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (0W power consumption)
	Size (mm) : 220(W) * 320(D) * 1200(H)
	Weight: 25Kg

EYEVACS LPR4Lite

License plate number reader-lite(SBI-LPR007LPR4L)

License plate number reader without electronic display board

- Additional installation at the entrance, where it is difficult to shoot with a single LPR for rear shooting or the direction of entry.
- Equipped with its own license plate recognition engine

Main Function (LPR)	Max 3M Pixels CMOS Color Global Shutter IP Camera
	Custom IR Strobe B/D
	Integrated Control B/D : Camera, LED display, Relay, IR, 4CH SW (10/100 Ethernet) control
	LED Signage: 64 x 128 Pixels, 7 Colors
	50W Dual Output SMPS
	Built-in license plate number recognition engine
	Network connection to server (Cloud or Local)
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (0W power consumption)
	Size (mm) : 220(W) * 320(D) * 1200(H)
	Weight: 22Kg

EYEVACS EYEGATE2

Unmanned Visitor Management(SBI-EG007V2)

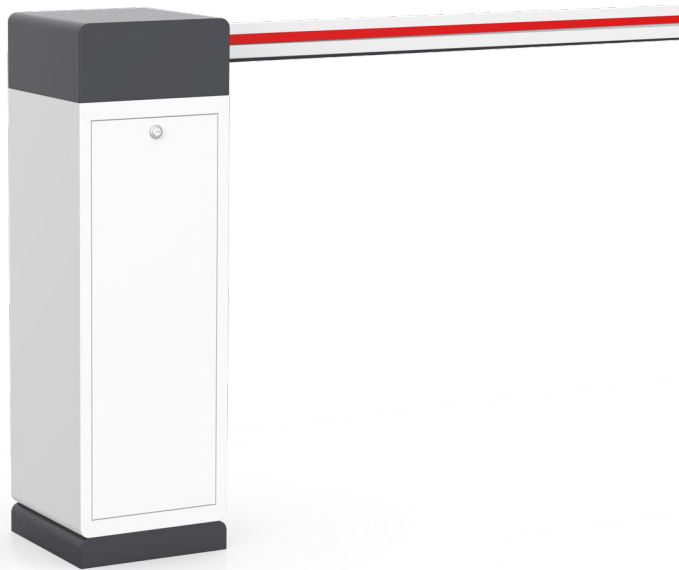|	
Main Function	7-inch LCD display
	Integrated Control Board and Dedicated Metal Keypad
	Bluetooth (BLE) and User App Linkage
	*Unmanned management mode of visitor entry vehicles: (1) Security check, (2) resident # Input, (3) Free Pass
	(1) Security confirmation: Intercom call (Enter the room number, phone number, and purpose of visit) – > Barrier Manual Open -> Resident App Notification
	(2) Input : resident room # Entry - > Barrier Auto Open - > Resident App Notification (Approval/Rejection)
	(2) Input : room # + Phone Number -> Barrier Auto-Open -> Resident App Notification (Approval/Rejection)
	(2) Input : room # + Password (OK) - > Barrier Open - > Resident App Notification
	(2) Input : room # + Resident App Video Call (Approved) - > Barrier Open - > Resident App Notification
	(3) Free Pass: Automatic opening of the Auto Barrier, all vehicles entering and leaving are recognized and stored in the cloud
	Barrier opening via QR code (residents, visitors with reservations)
	Auto Barrier opened via RF card (residents)
	3 assignable Hot KEY buttons
	VoIP video call (security room, residents' app)
	Power Noise Filter
	50W Dual Output SMPS
	60~120mm FAN
	3W Speaker
	Power: 220VAC 60Hz only
	Power Requirement : 30W
	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
Spec.	240(W) * 340(D) * 1300(H)
	Weight: Around 32Kg

Stand-alone Intercom (VoIP)

EYEVACS VoIP intercom

Freestanding intercom(SBI-VIP007FSV1)

Main Function	VoIP Phone (SIP)
	Ethernet 10/100
	MIC : for VoIP
	Push-button : VoIP
	Power Noise Filter
	3W Speaker
	Power: 220VAC 60Hz only
	Power Requirement : 10W
	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	* Remote Barrier opening function when making a phone call (optional)
Spec.	220(W) * 260(D) * 1200(H)
	Weight: Around 20Kg

Auto Barrier

Auto Barrier (SBI-AB007V2)

Main Function (Barrier)	BLDC Motor Control B/D
	Motor Specification : BLDC 100W (24VDC)
	Robust mechanism for long lifetime.
	Barrier Bar : 3m basic (double-sided LED lighting)
	Loop detector : 1 channel
	Remote Power Control
Spec.	Exterior material: Steel self-supporting rain-proof type 2 degrees outdoor powder coating
	Power: 220VAC 60Hz (130W power consumption)
	Size (mm) : 325(W) * 405(D) * 1060(H)
	Weight: 37Kg

Apartment-specific cloud unmanned parking control system

| Manual Switch | Routers | VoIP Switchboard | VoIP Phones for Security Rooms | Tablet PC for the guard room | Sign board | Amazon Cloud Servers (Admin Admin, User App) |

Unmanned Parking

Launched an all-in-one apartment-specific resident app and manager web

Korea's first apartment-specific all-in-one resident app and manager web development

- Unmanned parking control at the entrance of the apartment, unmanned access control at the entrance, parking guidance in the underground parking lot, CCTV and apartment convenience services are integrated into a single app

- With a single appointment, you can enter and exit the vehicle as well as the lobby front door at once. (One EYEVACS app can be used by residents as well as visitors)

- Entrance Bluetooth One-Pass and cloud-based video call, lobby phone, and access control linkage

- Specialized services for apartments (visit reservation, parking mileage, vote, community reservation, apartment broadcasting, bulletin board, local advertisement, etc.) are all provided in one app

- Security patrol app, continuous provision of apartment convenience services in addition to text message service

Language conversion as needed

Apartment-specific cloud-integrated administrator webpage
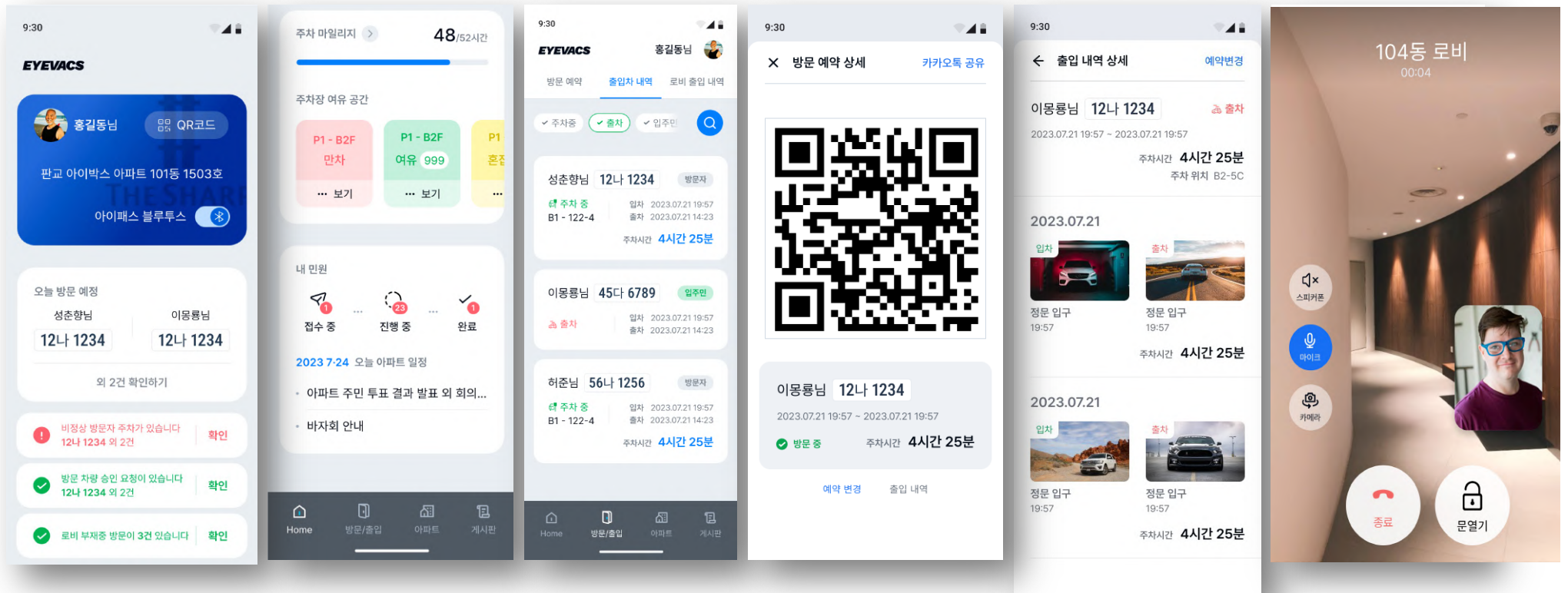
EYEVACS

입주민 관리
- 입주민 명부
- 주차 마일리지
- 동/호별 정보

차량 관리
출입 관리
입주민 소통
커뮤니티
아파트 관리
시스템 설정

SB 관리자
아이박스 아파트
로그아웃

아이박스 아파트
SB 관리자님, 환영합니다!

방문차량 등록 공지사항 등록 아파트 방송 등록

승인 요청
입주민 등록 신청 **5**
민원 신청 **10**
입주민 차량 등록 신청 **2**
시설 예약 신청 **30**

입주민 민원 현황
17 신규 | **35** 처리 중

장비 정상
정상 정문 입구 차단기
정상 105동 로비 차단기

주민투표 진행 현황
이달의 주민 선정의 건 　　　마감 2023.07.20
대상: 193세대
참여 70% (120세대)　　　미참여 30% (73세대)

완료 화단 리모델링 디자인 선정 　　마감 2023.07.20
대상: 193세대
참여 70% (120세대)　　　미참여 30% (73세대)

최근 일정
< 2023 12 >

월	화	수	목	금	토	일
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2

3 자선 바자회
오전 9시 ~ 오후 5시

25 크리스마스
하루 종일 / 반복일정

주차장 이용 현황
B1 여유
일반 30 / 200
특수구역 20 / 50
전기차 5 / 10

B2 혼잡
일반 180 / 200

1F2F 만차
일반 30 / 200
특수구역 20 / 50
전기차 5 / 10

Language conversion as needed

Provision of various services through the administrator's webpage (real-time monitoring)

Language conversion as needed

Provision of various services through the administrator's webpage (access history management)

EYEVACS

대시보드 | 차량 모니터링 ✕ | 차량 출입 기록 ✕

- 사이트 관리
- 아파트 관리
- 관제실
  - 차량 모니터링
  - 차량 출입 기록
  - 출입 제한 관리
  - 주차 위치 조회
  - 로비 출입 기록
  - CCTV 모니터링
- 공동체 활성화
- 부가 서비스
- 시스템 설정

구미

로그아웃

이용약관 | 개인정보처리방침

© Silicon Bridge Inc.

미등록방문객 차량 생성

관제실 / **차량 출입 기록**

차량 출입 기록 | 방문 차량 조회 | 상시 방문 차량 조회 | 거절 차량 조회 | 미승인 차량 조회

차량번호 [　] 동 [　] 호 [　] 연락처 [　] 차량구분 [　] 출입구분 [　]

게이트 이름 [　] 승인구분 [　] 주차시간 (이상) [　] 시간 시작일 [2024-02-28] [00:00:00]

종료일 [2024-03-01] [00:00:00] 필터 지우기 | 검색

내보내기 | 상세 보기 | 입출차 기록 | 출입제한 차량 등록 | 차량 정보 변경 | 수동입차 | 수동출차

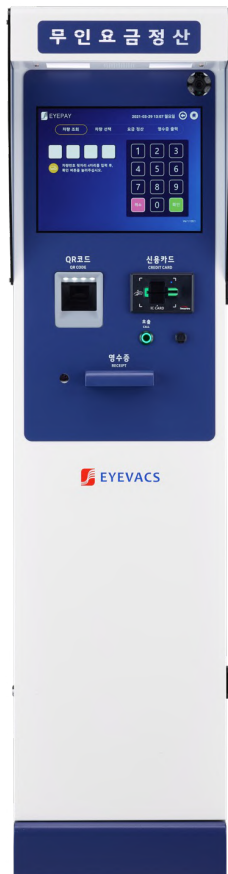| ☐	차량번호 ⇅	차량구분 ⇅	동 ⇅	호 ⇅	입차 게이트 ⇅	입차일시 ⇅	출차 게이트 ⇅	출차일시 ⇅	주차시간 ⇅	방문
☐	220	미등록방문객	10	04	정문 방문객용	2024-02-29 13:16:44			0시간 0분 24초	비밀
☐	27	입주민	10	01	후문 입구	2024-02-11 13:59:15	정문 출구1	2024-02-29 13:16:26	431시간 17분 11초	
☐	149	미등록방문객	99	99	정문 방문객용	2024-02-29 13:16:24			0시간 0분 44초	비밀
☐	55	입주민	10	04	후문 입구	2024-02-29 12:01:46	후문 출구	2024-02-29 13:15:44	1시간 13분 58초	
☐	경북 1	상시방문객	99	99	정문 방문객용	2024-02-29 13:13:06	정문 출구2	2024-02-29 13:15:31	0시간 2분 25초	
☐	152	미등록방문객	10	04	정문 방문객용	2024-02-29 13:15:27			0시간 1분 41초	비밀
☐	192	입주민	10	02	정문 방문객용	2024-02-29 13:00:48	정문 출구2	2024-02-29 13:15:22	0시간 14분 34초	
☐	06	입주민	10	03	정문 입주민용	2024-02-28 18:39:10	정문 출구1	2024-02-29 13:15:04	18시간 35분 54초	
☐	000	미등록방문객			정문 방문객용	2024-02-29 13:14:57			0시간 2분 11초	
☐	000	미등록방문객			정문 방문객용	2024-02-29 13:14:23			0시간 2분 45초	
☐	경북 3	상시방문객	99	99	정문 입주민용	2024-02-29 13:12:29	정문 출구1	2024-02-29 13:14:04	0시간 1분 35초	
☐	18	입주민	10	205	후문 입구	2024-02-29 13:13:44			0시간 3분 24초	
☐	114	입주민	10	02	후문 입구	2024-02-29 13:13:39			0시간 3분 29초	
☐	117	입주민	10	03	정문 방문객용	2024-02-28 20:41:59	후문 출구	2024-02-29 13:13:34	16시간 31분 35초	

Language conversion as needed

EYEPAY

Advance Unmanned Fare Payment Machine(SBI-APS007C2P-IV)
Exit fare payment machine(SBI-APS007C2-IV)

| Main Function	15-inch touchscreen LCD display
	Android OS Embedded Board
	Card payment terminal (card-only unmanned fee payment)
	QR code/barcode reader for discount voucher application (barcode receipt, QR code receipt support)
	Megapixel IP Camera
	Voice guidance
	Amazon Cloud (AWS)-based Administrator Program
	On-site customized pricing policy establishment function and support of various discount methods
	VoIP intercom
	MIC, Push-button : VoIP
	Receipt Printer
	Power Noise Filter
	Proximity Sensor
	50W Dual Output SMPS
	60~120mm FAN
	3W Speaker
	Power: 220VAC 60Hz only
	Power Requirements : 60W(TBD)
	Exterior material: Steel self-supporting rain-proof type 2-degree outdoor powder coating
Spec.	400(W) * 400(D) * 1600(H) / 400(W) * 400(D) * 1400(H)
	Weight: Around 55Kg / Around 50Kg

Cloud-based Unmanned Auto Payment System

Various discounts

1. Home plus barcode receipt discount by amount
2. CGV QR code, barcode receipt for 3 hours free
3. Express Bus Terminal Barcode Receipt 50% Discount
4. App discounts
5. QR code discounts
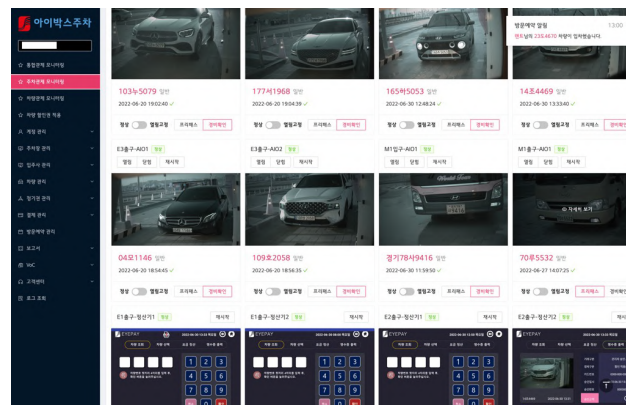
Cloud-based Integrated Management System
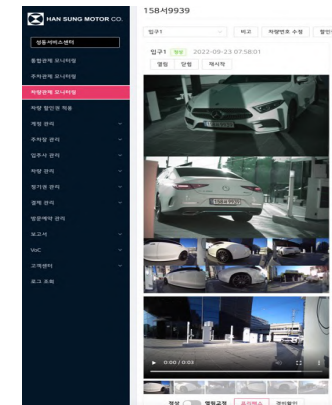
Cloud-based Car Surface management system

Cloud-based Unmanned Auto Payment System

Manual
Switch

Routers

VoIP
Switchboard

VoIP Phones for
Security Rooms

Amazon Cloud Servers
(Admin Admin, User App)

Unmanned Auto Payment System Manager Page

Cloud-based unmanned parking control/toll settlement system
- Flexible parking fee operation
- Customized parking fees according to preferred / non-preferred parking locations, off-demand hours, and peak hours are set and operated directly for each site

With the ground parking rate
Underground parking rate and flexible operation of parking fees by day of the week and time of day

Language conversion as needed

Cloud-based entry control and vehicle visual inspection system

Cloud-based Unmanned Parking Control / Vehicle Appearance Inspection System (Photos, Videos)

- Unmanned vehicle entry and exit inspection maximizes administrator convenience
- Cloud-based vehicle access data management

Mercedes-Benz Hansung Automotive Service Center in Korea

Language conversion as needed

12 Unmanned Access Control System

- Launched cloud-based smart unmanned entrance control EYEPASS series v1.0
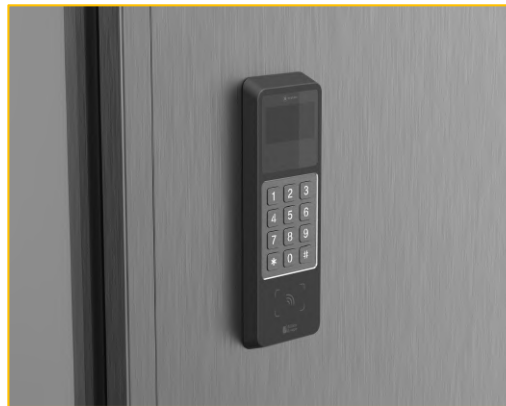
Launched 3 new cloud-based unmanned access control systems – EYEPASS Mini, EYEPASS Key and EYEPASS Lobby

⇒ New Bluetooth app for automatic access and gate open : EYEPASS mini

⇒ Places that cannot use internet connection and need access management through the app, such as community facilities and gyms: EYEPASS key

⇒ Cloud-based unmanned entrance app for video call access control: EYEPASS lobby

EYEPASS Mini – Smart Bluetooth OnePass

EYEPASS mini

Smart Bluetooth OnePass (SBI-EP007V1)

Only power and an "open" signal wire are needed

Install the EYEVACS app, have your phone with you, and the front door will open automatically.

- After sensing that the user who installed the smartphone app is entering a specific detection area in front of the door, it automatically opens the door when it is confirmed that the user is an authorized user through Bluetooth linkage. (apartment porch, community facilities, offices, etc.)

category	Third-Party Products	EYEPASS-Mini
How it works	Bluetooth (BLE)	Microwave sensor (access detection area setting)& Bluetooth (BLE) door control
Differentiator	Control the entrance door only with smartphone Bluetooth linkage *Bluetooth makes it difficult to accurately measure the distance, so it is difficult to know the exact location of the person entering and exiting and controlling the opening of the door. To compensate for this, the use of mobile phone GPS causes cell phone battery drain	Microwave sensor to the entrance door After detecting the person who enters, the door is opened by Bluetooth linkage, so it is possible to accurately identify the door open zone. No need to use your phone's GPS function No internet required, just a power source and an open signal

EYEPASS Unique way

Main Function	32bit dual core microprocessor
	Powerful generic Wi-Fi & Bluetooth LE modules
	Microwave Doppler radar module
	Relay Control
	LED, Beep announcement
	Power : 12V DC
	Power Requirements : 5W
	Exterior Material : Plastic (Injection Mold)
Spec.	202mm(W) * 66mm(H) * 53mm(D)
	weight : 200g

EYEPASS Key – Smart Unmanned Access Control
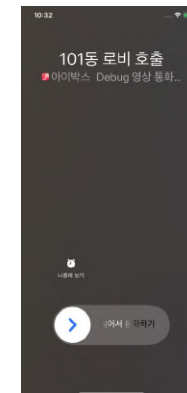
EYEPASS Key

Smart unmanned access control(SBI-EPK007V1)

Bluetooth, QR code, password, RF card

- No internet required: only power and an "open" signal line (If you have a WIFI connection, you can make a voice call to the resident's app.)

Residents:

App Bluetooth, password set with the app (4 digits), QR code generated by the app, RF card for each household

When entering a community facility, hold your phone close to the EYEPASS key to verify your identity.

Through the creation of QR codes in the resident app, authentication can be used in various forms. (Community, cafeteria, etc.)

Visitors:

QR code sent to KakaoTalk or temporary password (4 digits), visitor-only app

It can be used independently with the EYEPASS key or in conjunction with the Mini (entrance lobby, etc.)

Once the EYEPASS key is installed in the Wi-Fi area, visitors can use the EYEPASS key to tap the number of residents they want to visit. When the call button is pressed, a call is made to the resident's app, and the resident can remotely open the door after a voice call.

Main Function	32bit dual core microprocessor
	2.4" OLED display (128x64)
	Wi-Fi module
	VoIP call only with WIFI
	Bluetooth (BLE)
	QR Code Reader
	RF Card Reader
	Metal keypad
	1W Speaker
	Power : 12VDC or 24VDC
	Power Requirements : 12W
	Exterior Material: Plastic (Injection Molding), Tempered Glass
Spec.	79mm(W) * 223mm(H) * 32mm(D)
	weight : 500g
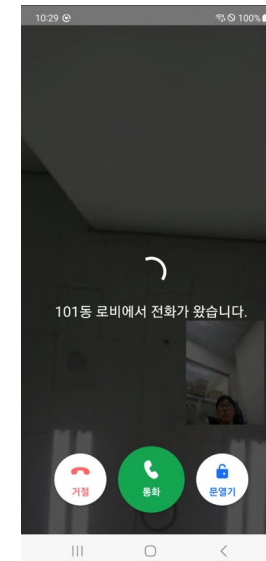
Voice Calls

EYEPASS Lobby – Cloud Lobby Phone

EYEPASS Lobby

Cloud Lobby Phone(SBI-EPL007V2)

Main Function	32bit dual core microprocessor
	7-inch TFT LCD display
	Ethernet, WIFI, Bluetooth (BLE)
	QR Code Reader, RF Card Reader
	VoIP Video Calls
	Dedicated touch button
	Access method: Bluetooth, QR code, password, RF card, video call
	Power: 220VAC 60Hz
	Power Requirements : 30W
	Exterior Material: Plastic (Injection Molding), Tempered Glass
Standard	199mm(W) * 235mm(H) * 27.5mm(D)
	Weight: Around 3Kg

Video call, Bluetooth, QR code, password, RF card

Residents

- Automatic entry via EYEVACS Resident App Bluetooth (BLE)
- Access through the EYEVACS Resident App QR Code
- Enter the 4-digit password set in the EYEVACS resident app to enter
- Access via dedicated RF card
- Check the visitor's entry and exit history in the EYEVACS resident app

visitors

- If you press the call button with the room number to visit, you can enter and exit after a video call with the residents.
- After making a visit reservation through EYEVACS app, the QR code and temporary password are delivered to the visitor through KakaoTalk, etc. => Visitors can read it through the QR code reader when entering, or enter a 4-digit temporary password before entering.
- Press the call button to the security guard to enter and exit after talking to the security guard

Management Office (Security Office)

- VoIP intercom or smartphone app to talk to visitors and unlock doors
- Check the visitor access history through the EYEVACS admin webpage

13 Ultrasonic Parking Guidance System

- By applying a unique serial communication method, it can detect vehicles quickly and accurately. (1 sec <-> 8 sec ~ 26 sec)
- It is easy to install, less prone to breakdowns and malfunctions.
- With cloud linkage, it is possible to check the parking status through the user app and set the preferred parking area.
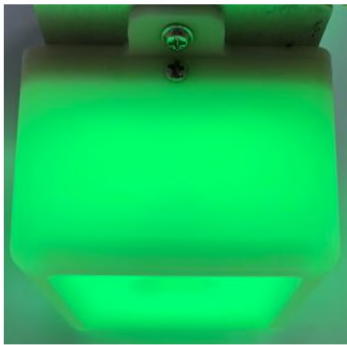
Green: Non-occupied

Red : Occupied

Green: Parking available

Green: Fully Parked

Parking Area Signs

Ultrasonic parking guidance system overview and differentiation of proposal method

Easy to install, fast speed, smart light linkage, cloud web/app linkage
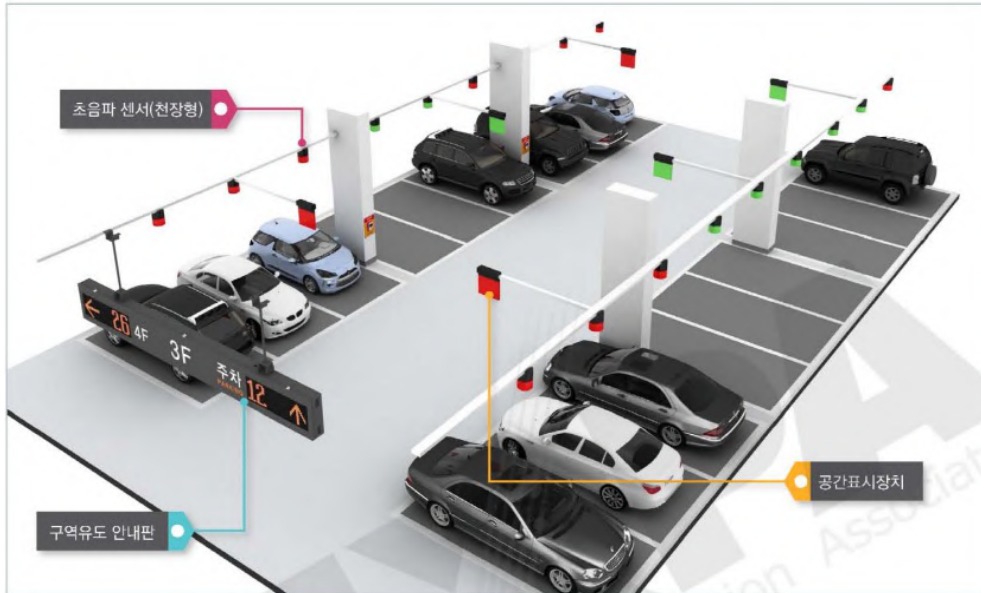
Daejeon ETRI setting site

Items	What makes the proposal different?	
overview	By using 3-wire DC-based wiring on the raceway, it is possible to configure a system that integrates the power supply and control of all sensors, controllers, displays, and LED lights (integrated piping)	
Wiring Preparation	3 Lines : Vcc+(1), Gnd(1), Data(1)	
Sensor method	Ultrasound (MCU is built-in, and only the results are delivered after self-judgment)	
System Configurations	BUS-based communication method, free system configuration	
Power supply method	20~40 VDC central integrated power supply	
Using communication wiring	Use both stranded and solid wires	
Wire termination	Unnecessary	
How to connect your device	No restriction on daisy chaining, STAR method, point branching method, etc.	
Communication method	Simple 8 bit protocol (Use our own protocols)	
Parking Signal Processing Speed	A) Very fast (1 second) B) 1 sec > RT C) Display time : 1~2 sec	For third-party products: At least 8 seconds (PLC communication) Up to 26 sec (RS 485 communication)
Scalability	On the same raceway (70mmx40mm) where the ultrasonic sensor is installed Install various products such as smart lighting, camera, emergency treatment, and air blow at the same time Operable	

Ultrasonic parking guidance system configuration

GW(Gate Way)

amazon web services

CM(Central Manager)
(max 16 LM = > 2048 parking surfaces)

LM(Local Manager)
(Maximum 128 SIC)

Up to 2048 parking spaces can be installed per set

Parking on one raceway, lights can be installed together

LM(Local Manager)

SBC

SIC

SIC

SIC

Entrance Signboard   Floor/Block Signboard

Parking Lamp   LED Light Unit

Emergency Button   Siren

Air Blower

Ultrasonic parking guidance system installation concept diagram (parking sensor + smart lighting)

주차장 천장

스트롱앙카

보

0.96m

1.5m

1.5m

행거

전산볼트

Raceway (70x40)

0.04m

주차센서

주차면등

주차센서

주차면등

3.45m

(조명은 5m 이상 이격하여 설치)

2.45m

2.4m

주차장 바닥
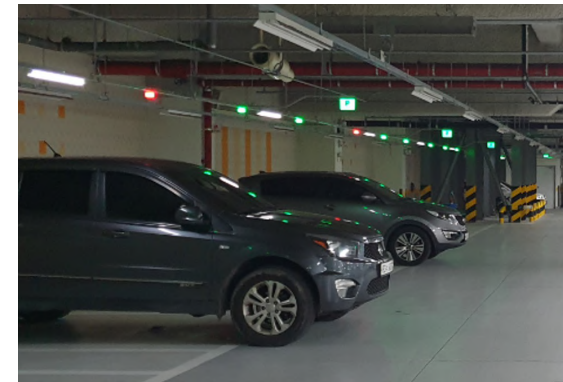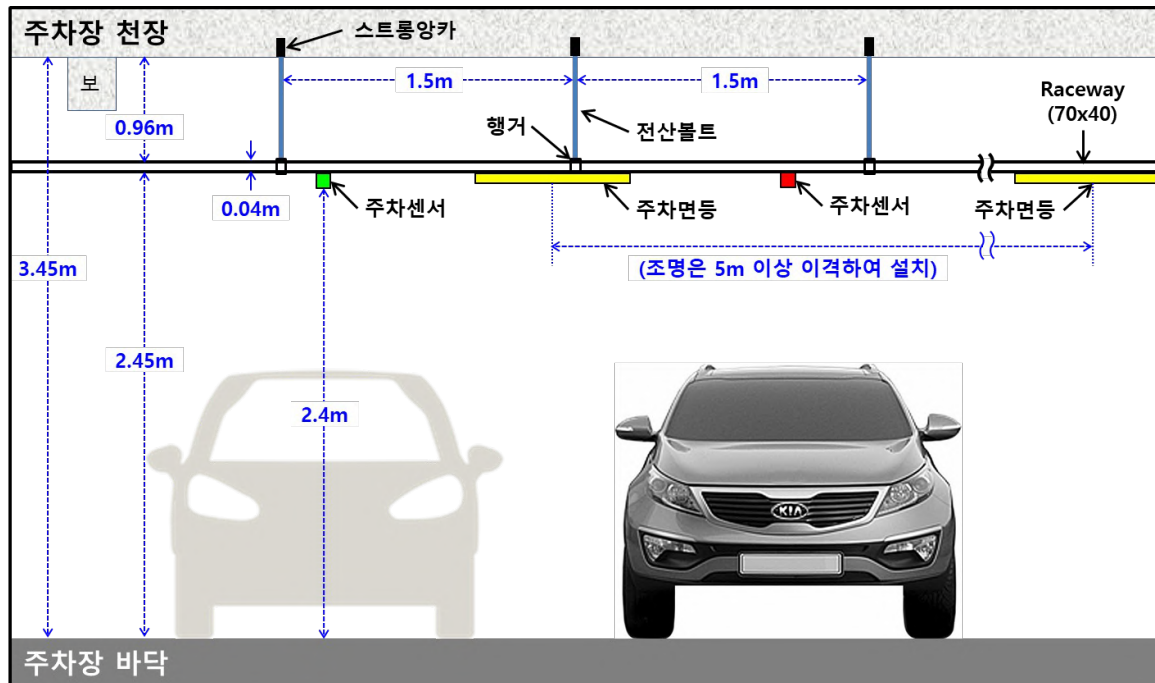
When there is no movement with the car
Lighting Power Consumption: 20%
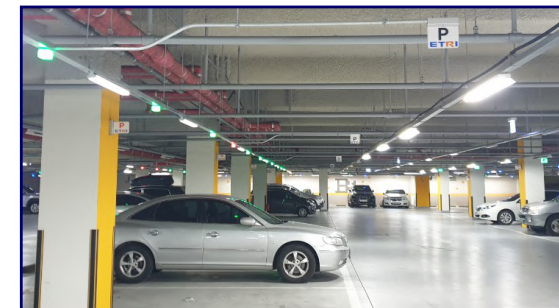
When there is movement with the car
Lighting Power Consumption: 100%
=> Gradual Dimming

Ultrasonic parking guidance and smart lighting are installed on one raceway to increase economy and functionality.

The lighting is set to 20% normally, and the power consumption is reduced by 100% when approaching the vehicle, and by gradually dimming when moving away (Munjeong-dong HBP & Daedeok Research Complex ETRI.)

ESIC001 (Sensor & Indicator Controller)

Ultrasonic parking surface vehicle detection sensor light(SBI-ESIC001)

Green: Non-occupied   Red : Occupied
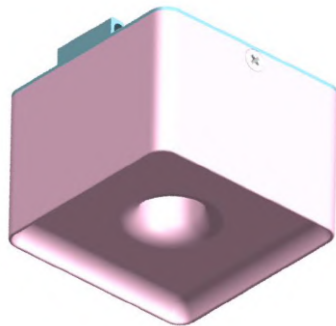
1. Synopsis

The ultrasonic Sensor & Indicator Controller detects the real-time parking status of the parking lot that requires parking surface management and displays the individual parking surface status in color.

2. Main Functions

Detects the presence of vehicles on the parking surface and transmits them to the Local Manager (LM)

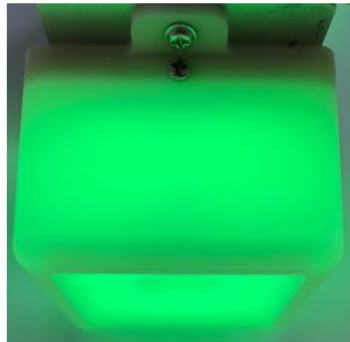Green (general parking surface tolerance condition), red (parking condition), blue (disabled parking surface tolerance condition)

Up to 4 colors can be displayed according to user request (green/red/yellow/blue)

Even if there is no upper controller, basic functions such as parking detection and status display on individual parking surfaces are operated without any abnormalities (self-diagnosis of communication status)

3. Main Specification

Vehicle detection time: within 1 second

Vehicle Detection Distance: 0.3m~3.5m

Input Voltage: DC40V

Power Consumption: ≒1.8W (40V x 0.045A)

Communication Method : SC-888B (1 wire bidirectional)

Color Display : RGB LED 360° omnidirectional

Operating temperature : -40°C~+70°C

Operating humidity : Less than 90%

Installation location: Attached to the bottom of the raceway and fixed with side screws

Dimensions : Width 60mm x Depth 60mm x Height 56mm

Parking Area Indicator

EGPL001

Parking Area Indicator(SBI-EGPL001)

Green: Parking available

Green: Fully Parked
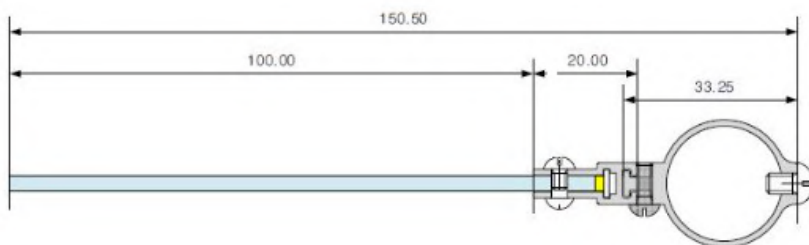
1. Synopsis

Displayed in color so that the vehicle can see if there is a parking surface available in the parking area

2. Main Functions

Receive and display the parking availability status for each parking zone from the vehicle detection sensor on the parking surface.

When the nearby emergency switch is activated, it flashes red and green to indicate the emergency status.

Color display: Green (parking area), Red (full parking area)

Up to 4 colors can be displayed according to user request (green/red/yellow/blue)

Compared to other products, it has a very thin thickness and light structure

Installation of 1 parking surface sensor light for every 2~3

3. Main Specification

Input Voltage: DC20V

Power Consumption: ≒0.8W (20V x 0.04A)

Color Display: RGB LED360˚ omnidirectional

Operating temperature: -40˚C~+70˚C

Operating Humidity: Less than 90%

Attach to the raceway using steel piping and secure with screws

Exterior Dimensions

• Display Body: Width 150mm x Height 120mm x Thickness 3mm (Light guide plate thickness)

• Maximum height 150.5mm when fastening holder (inner diameter Ø22mm) (excluding set screws)

EFZIB (Floor Zone Information Board)

Area Signs(SBI-EFZIB001) Parking guide sign(SBI-EZIB001)

Parking Area Signs

Parking Guide Signs

1. Synopsis

Information boards for each floor/area are installed at the entrance of the floor where vehicles enter or at the junction of the passage to display the situation such as the number of parking spaces available in real time.

2. Main Functions

Real-time display of parking availability information for the floor/area

Alternately displays the remaining parking number and status text information (clear, crowded, full)

• When the car is full, the red 'X' mark is superimposed on the driving direction indicator arrow.

• According to the user's request, the information on the disabled parking surface can also be displayed alternately.

3. Main Specifications

Parking surface entry/exit detection standard up to 1 second update of the remaining parking surface number by floor and area

Display : Indoor LED module (high-brightness LED Back Light, tempered glass/light guide plate can be selected)

The input voltage: DC40V

Power consumption: ≒26W (single-sided 1-way, based on 2 LED module models)

Communication Method : SC-888B (1 wire bidirectional)

Operating temperature:-40°C~70°C

Operating humidity: 90% or less

Installation location: Entrance to the entrance floor or branch area of the passage (suspension type)

Enclosure dimensions: Width 308mm x Depth 180mm x Thickness 80mm (1-way cross-section, 2 LED modules model)

EEIB (Entrance Information Board)

General information board at the entrance(SBI-EEIB001)

Entrance parking
number sign

1. Synopsis

The entrance information board is installed at the entrance of the parking lot to inform users entering the parking lot of the number of parking spaces on each floor in real time, inducing a smooth flow of vehicles.

2. Main Functions

Receives parking status information for each floor from the central controller and provides real-time display of remaining parking surface numbers and status text information (spare, congestion, full) alternately

• According to the user's request, the information on the disabled parking surface can also be displayed alternately.

3. Main Specifications

Parking surface entry/exit detection standard within a maximum of 1 second update the number of the remaining parking surface on the floor

Enclosure dimensions and designs are approved and confirmed after proposal.

Display : Outdoor LED module (high-brightness LED Back Light, tempered glass/light guide plate can be selected)

The input voltage: DC40V

Power Consumption:≒78W (Based on 3-layer information display)

Communication Method : SC-888B (1 wire bidirectional)
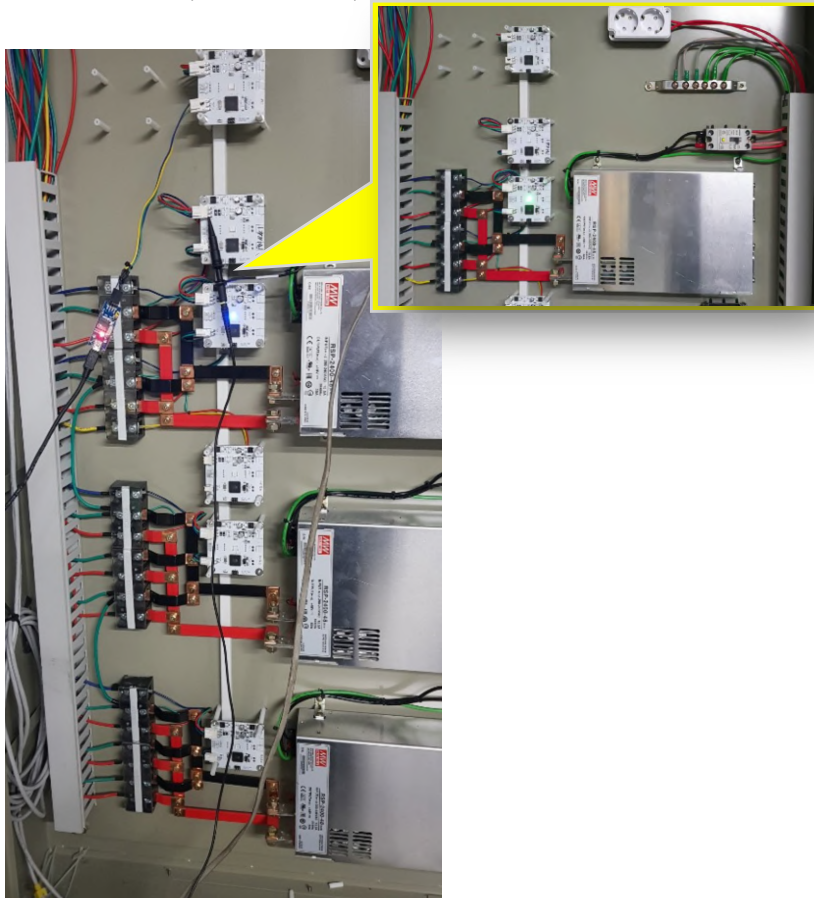
Operating temperature:-40°C~70°C

Operating humidity: 90% or less

Location : Parking lot entrance (self-supporting type)

Enclosure dimensions: Width 450mm x Depth 1,700mm x Thickness 200mm (Changeable)

ECB (Control Box)

Control Panel(SBI-ECB001)

Layout inside the control panel (example)

1. Overview

The control panel protects electrical and electronic systems such as zone controllers and power supply systems (SMPS)

2. Main Function

Supplying power to vehicle detection sensors and various I/O devices

Components : Zone Controller, Power Supply, Auto Barrier, Grounding Strip, Terminal Block, Cable

For stable power supply, one SMPS is used for each zone controller

3. Key Specifications

Depending on the site, enclosure dimensions and number of components may change. After proposing, it is approved and confirmed

Enclosure dimensions: 450mm wide x 400mm long x 150mm deep (based on parking lots with 128 sides or less)

Enclosure Material: SS1.6T, RAL7032 Powder Coating, Locking Handle, Inner Plate

Input Voltage: AC 220V

SMPS: 36V 150W (based on parking lot below 128)

Installation location: Disaster prevention room, parking lot wall/pillar (attached)

ESP (Surveillance Program)

Control Program(SBI-ESP001)
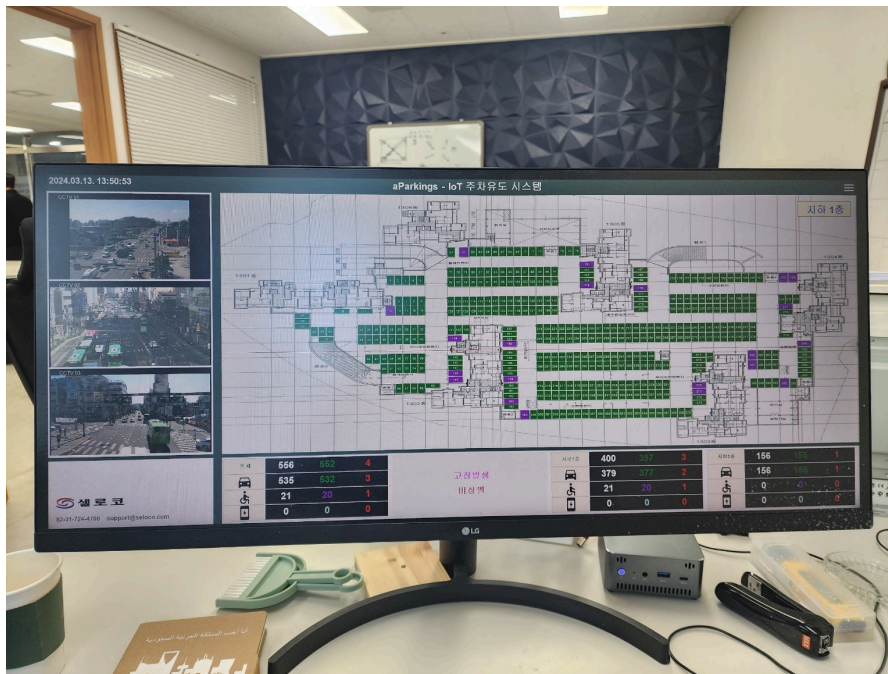
Integrated ultrasonic parking guidance control program

1.Overview

Monitor the parking status of vehicles in real time through a dedicated control program

2. Main Function

Check vehicle parking information by real-time parking surface area

On-site situation monitoring is possible through CCTV linkage

About reserved parking surface, reserve parking space in advance through LED flashing

3.Key Specifications

Windows-based control program

 Remote access via internal network

14 Video Parking Guidance / Video Control System

- Parking Guidance Camera, IP Camera, Thermal Imaging Camera, 180 Degree Camera, NVR Family

- 12MP Fisheye Parking Guidance Camera, 4MP Parking Guidance Camera (Underground Parking Lot Video Parking Guidance)
- 2MP/5MP/6MP fixed dome camera (elevator, porch, parking lot)
- 2MP/5MP fixed bullet camera (parking lot)
- 2MP/5MP Motorized Bullet Camera (Outside Parking Lot)
- 4MP Thermal Dual Dome/Bullet Camera (Electric Vehicle Charging Station Fire Monitoring)
- 4MP 180-degree camera (exterior photography of parking lot entrance)
- 12MP Sky View Camera (Rooftop)
- NVR – 4ch, 8ch, 16ch, 32ch, 64ch, 128ch, 256ch

CCTV Installation Guide (Example)

SKY VIEW

Underground parking

Outdoor parking and walkways

elevator

Electric Vehicle Fire Surveillance

Main entrance

Common entrance

Outskirts of the complex and playground

Overseas Partnership

1. Overseas Expansion Strategies
2. New Sales Partnership, Strategic Partnership - ODM

01 Overseas Expansion Strategies

Entering overseas markets and promoting localization strategies by country

- 2024 Signed a contract for the supply of parking control products in the United States

- Attended the 2024 World Security Expo (ISC WEST) in the U.S., conducted market research in North America, and met with regional partners

- 2024 Neom City, Saudi Arabia Installed "Smart IoT-based Construction Site Logistics Monitoring System"

- Starting with participation in ISC WEST in the US in 2025, entering the SSaaS(System Solution as a Service) platform in the US market

- Entered the "Cloud AI Parking Lot" SSaaS platform in the Japanese and Asian markets

• Development of one-board unmanned parking control system • Cloud-based fully unmanned control • Remote support for country-specific requests	• Country-specific product localization and demand response • Promotion of various cooperative projects • Partnership sales through local partners	• Global Marketing & Sales Hub • Global Target Marketing Content Creation • Establishment and management of global standard sales policies
Cloud-based Unmanned Service	**Lowering the threshold for entering foreign markets**	**Preparing for global sales for overseas expansion**

Hyundai Motor Company's Alabama Plant (USA)

2023 Global Project Management Forum (Saudi Arabia)

The Global Project Management Forum (GPMF), which brings together project management professionals from around the world, was held in Riyadh, the capital of Saudi Arabia, from June 12 to 13, 2023. As the guest of honor at this year's forum, a large number of Korean companies also attended and had time to exchange with organizations and companies ordering large-scale projects in Saudi Arabia, and only eight companies from around the world signed MOUs with Saudi Arabia this time.
Our strategic partners (ODMs) attended and signed an MOU with Saudi Arabia to install a smart IoT-based construction site logistics monitoring system at NEOM City's construction site!
In 2024, Silicon Bridge has signed a new contract to supply parking control equipment to the U.S. market.

02 New Sales Partnership

We are expanding the market from Korea to worldwide.

- We are looking for strategic partnership companies overseas.

- We propose SSaaS (System Solution as a Service) for overseas market.

- We supply optimized products for each country and site.

- It is also available as ODM/OEM products.

- Please contact us for details.

Silicon Bridge, Inc.

Contact : +82 10-3648-5896 / +82 1670-8891

Email : thkim@siliconbridge.co.kr / sales@siliconbridge.co.kr

Website : www.siliconbridge.co.kr / www.eyevacs.com

Address : SK V1 Tower 807-ho, 14 Galmachi-ro 288beon-gil, Jungwon-gu,

Seongnam-si, Gyeonggi-do, Republic of Korea (13201)

After numerous tests and challenges,
We will only present products that are optimized for
our users.

Thank you!

Silicon Bridge, Inc.

Office : +82 1670-8891

Email : sales@siliconbridge.co.kr

Site : www.siliconbridge.co.kr / www.eyevacs.com

Address : SK V1 Tower 731-ho, 807-ho, 14 Galmachi-ro 288beon-gil,

Jungwon-gu, Seongnam-si, Gyeonggi-do, Republic of Korea (13201)

@ 2024-03-29