

Artemis

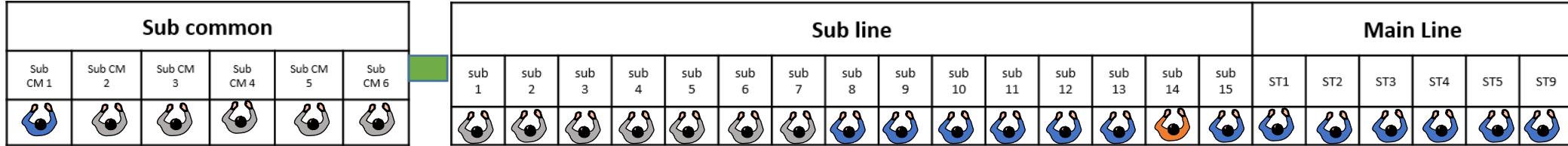
Automatic Route Trace & Eliminate Mistakes Intelligent System

- 
- What is Artemis
 - Advantage of Artemis
 - Example application

1. What is Artemis

Background

- Apply **MMC**(Man-Machine-Cell) Or Outsource Supplier



Advantage:

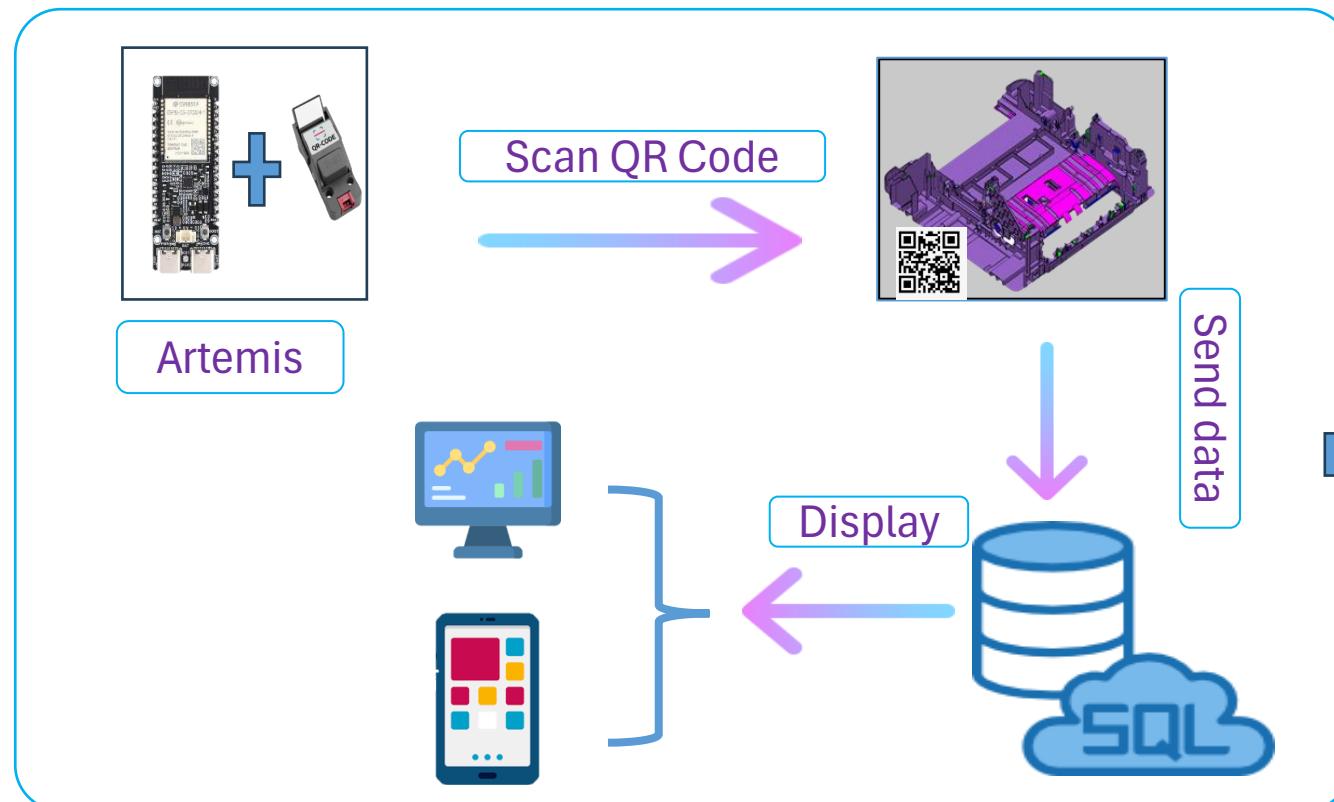
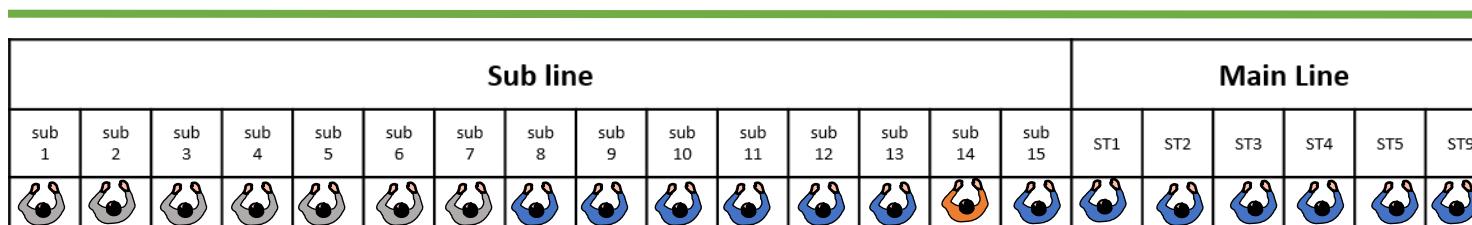
- Flexible adapt to production changes
- Light weight => Easy change layout
- Inexpensive, suitable for high mix, low volume production

Disadvantage:

- Production tactime is difficult to understand because it depends on humans
- Risk of skipping the process due to manual intervention
- Difficult to verify data later because things and devices are not linked.

1. Overview

Background



How Artemis work

Scan QR code of assembled part, unit



Confirm previous station



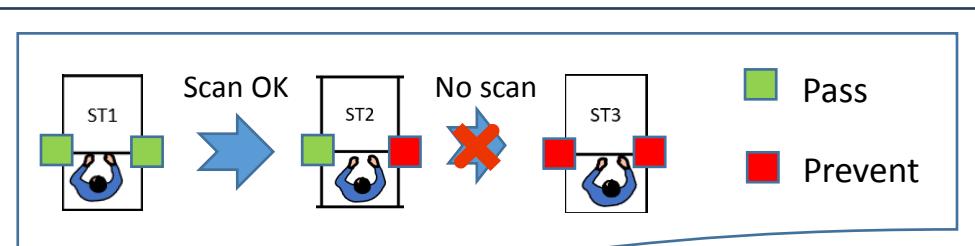
OK

Warning of OP skip check skip assemble



OK

Finish



- Auto record tactime every step
=> **Improve operation**
- Prevent skip step by cooperate with PLC
=> **Prevent OP mistakes**
- Auto store all history info
=> **Improve quality**

1. Overview

Equipment

QR Code Scanner Unit



- Scan QR code quickly, exactly
- Switch mode easy
- Compact design

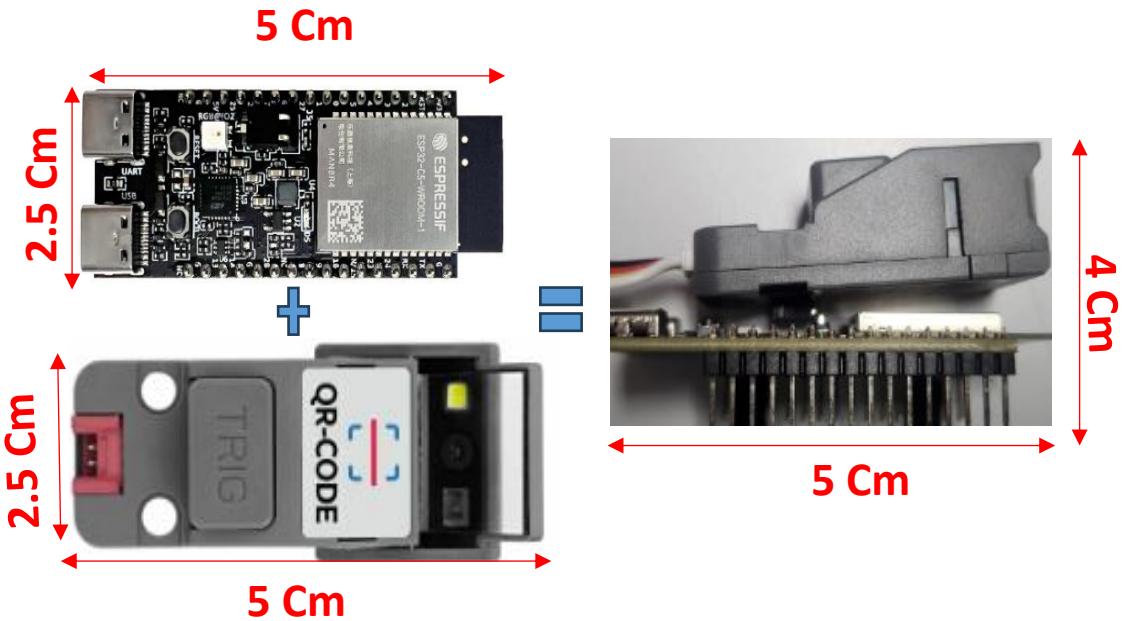
ESP32-C5 (Processor)



- Connect WiFi 5Ghz
- Can work with PLC
- Small & reasonable price

2. Advantage of Artemis

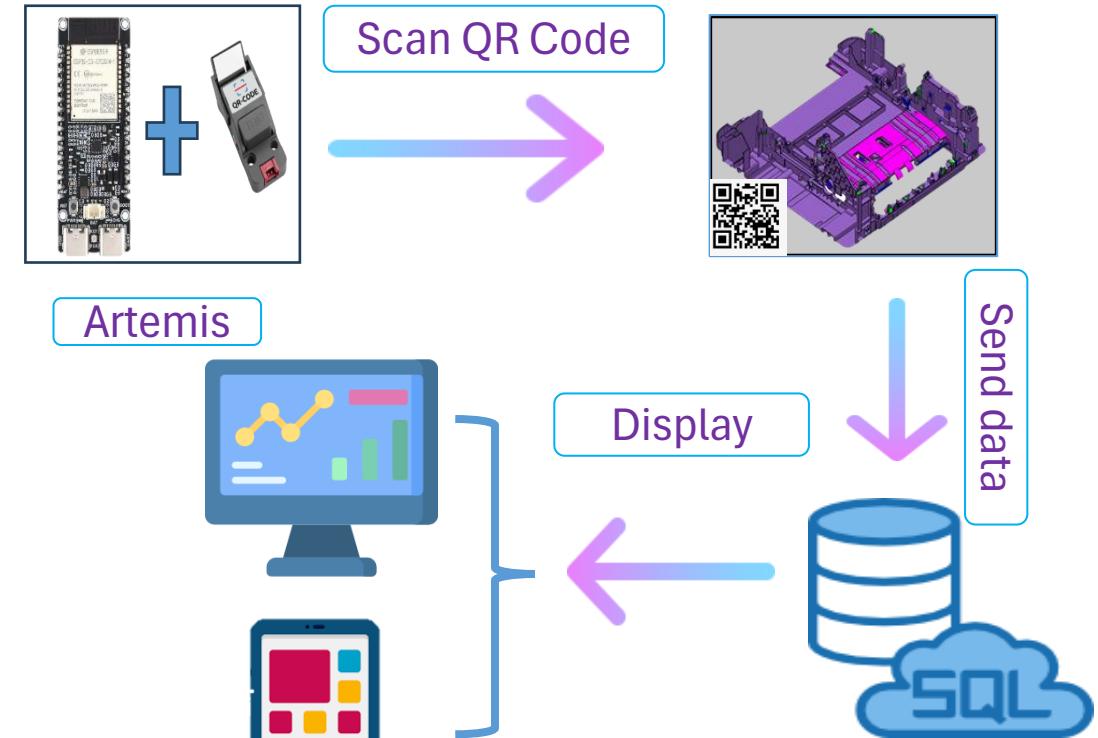
Advantage



Advantage:

- Still retains all the normal functions of a QR Code scanner
- More compact size than conventional QR code scanners
- Easy to install and no third party software required

→ In addition to the above improvements, Artemis is fully automatic.



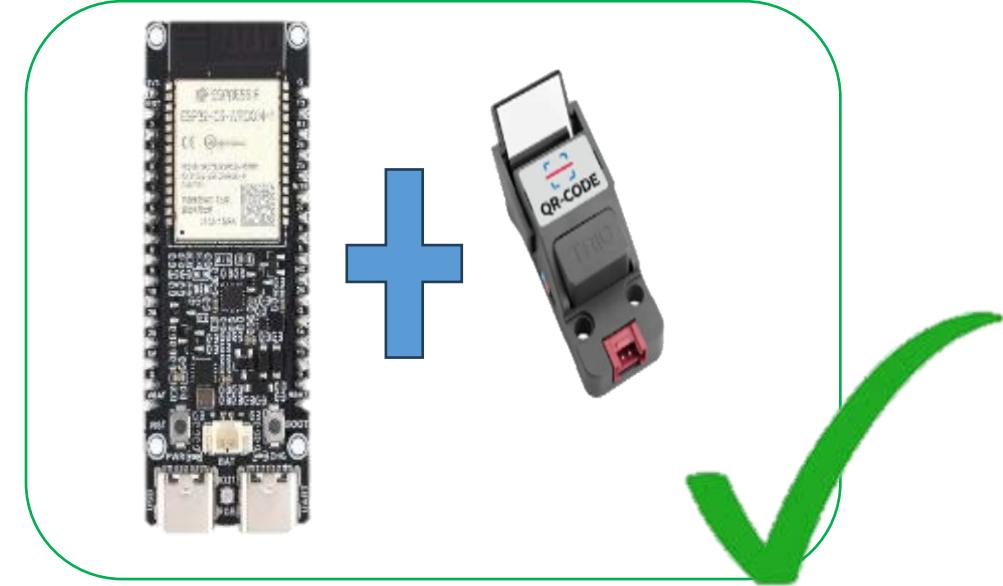
New:

- Auto record tactime every step
 - Prevent skip step by cooperate with PLC
 - Auto store all history info
- Not only save time & money but also reduce risk

2. Example application

Introduce about Artemis

Artemis : a system to scan QR code of parts to prevent missing assembly part

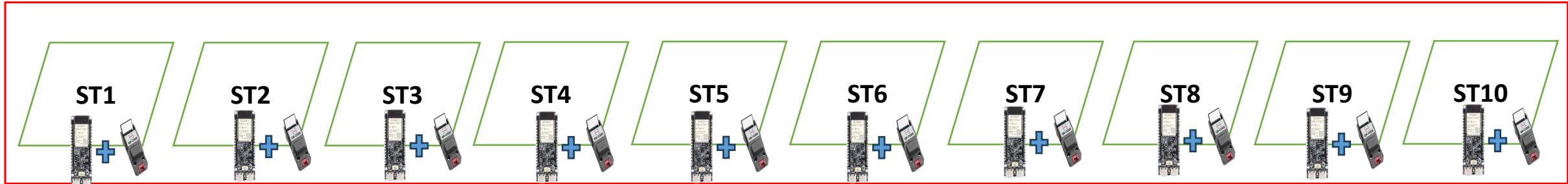


2. Example application

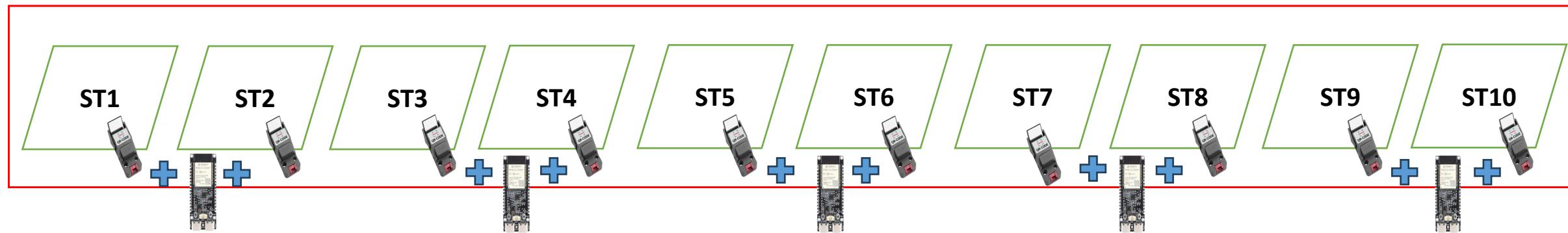
Introduce about Artemis

Artemis : a system to scan QR code of parts to prevent missing assembly part

Design 1:

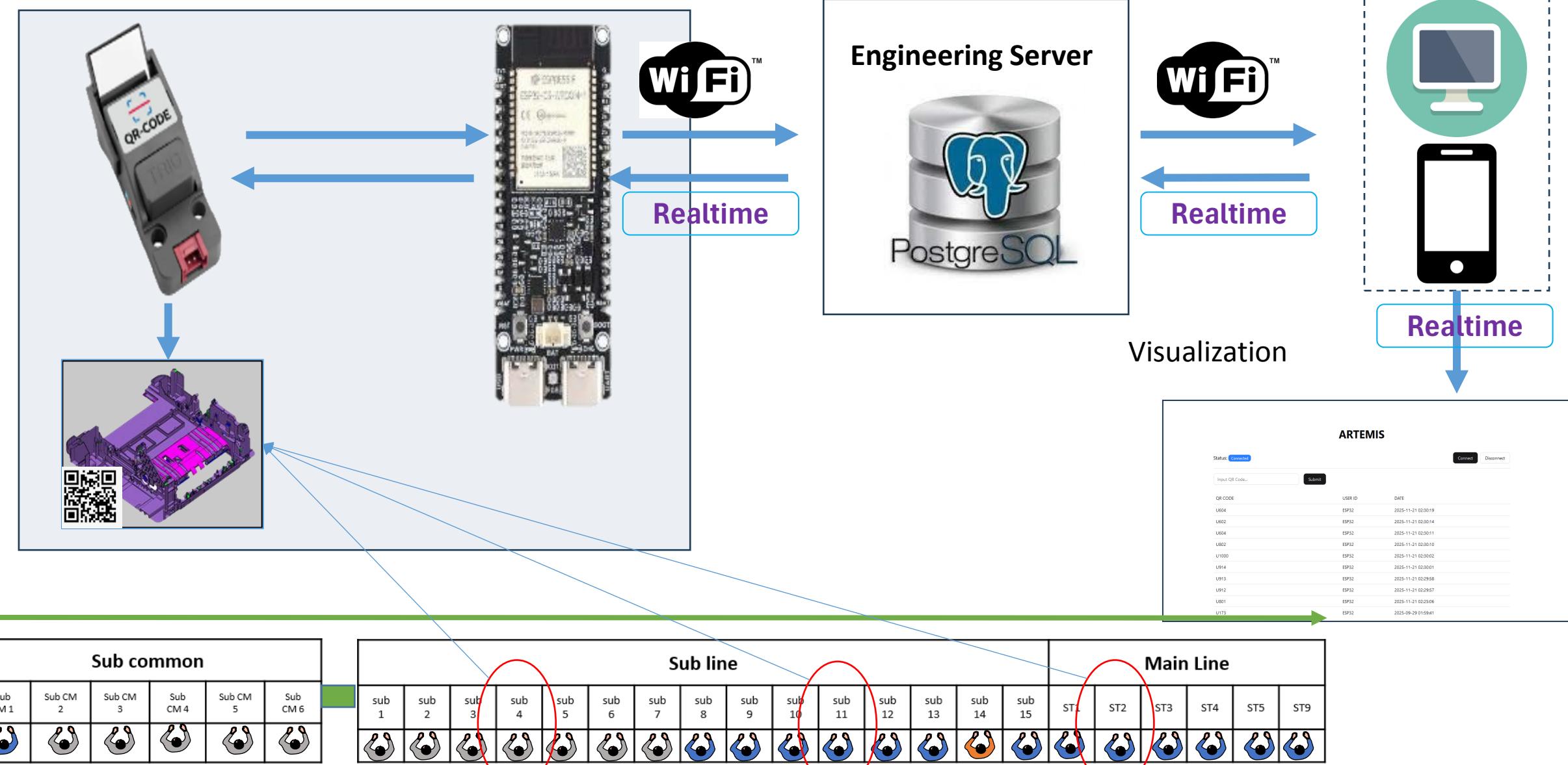


Design 2:



3. Result

Demo Configuration



3. Result

ARTEMIS

Status: Connected

Connect

Disconnect

Input QR Code...

Submit

QR CODE

U604

U602

U604

U802

U1000

U914

U913

U912

U801

U173

Result of
scan

Location of
Artemis

USER ID

ESP32

DATE

2025-11-21 02:30:19

2025-11-21 02:30:14

2025-11-21 02:30:11

2025-11-21 02:30:10

2025-11-21 02:30:02

2025-11-21 02:30:01

2025-11-21 02:29:58

2025-11-21 02:29:57

2025-11-21 02:25:06

2025-09-29 01:59:41

Time of scan

**THANK YOU FOR YOUR
ATTENTION!**



$$1 \text{ LINE} = \frac{(\$57 + \$89)}{1 \text{ Station}} * 10 = \$1460$$