

A photograph of a large greenhouse filled with rows of orchids in various colors including pink, yellow, and orange. The plants are arranged on raised wooden benches. A large, semi-circular brown graphic overlay is positioned on the left side of the image, containing the event title and speaker information.

WiFi HaLow Development Forum 2024

Zebra Chen / **TECHWARE**

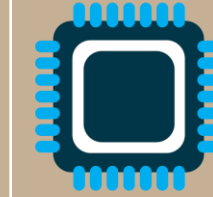
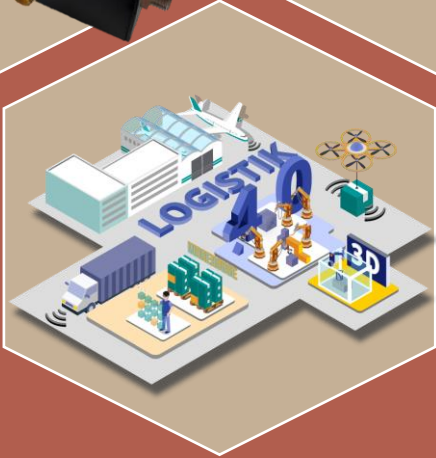
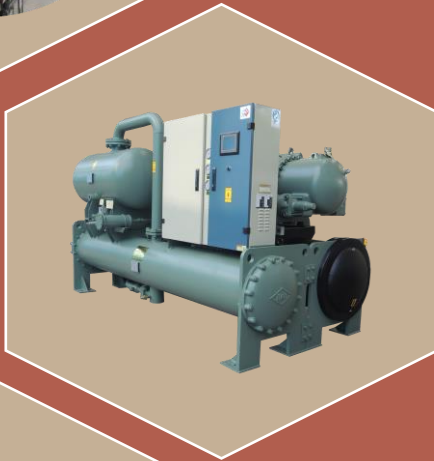


TECHWARE Technology Co. Ltd.

- Founded in 2001, participated in the transformation of naval radar of CSIST
- 2002, Launched first Windows CE tablet and exhibited at CES.
- 2003, Launched Digital Photo Frame based on ARM MCU.
- 2004-2016, be gold partner of Microsoft Embedded Systems and training center.
- 2005, Launched the worldwide first ARM-base SOM module.
- 2006-2016, transitioning from system integrator to product maker
- 2016-2023, focus on military system development and 5G/LTE IoT communication gateway
- 2023-2024, development and sales of WIFI HaLow gateway and device.



Industrial Communication Gateway - SBC700HaLow



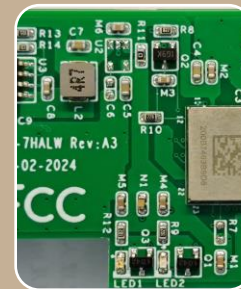
Networking Processor

- CPU 580Mhz
- 32MB Storage
- OpenWRT/Linux Kernel v5.1



4G/LTE & WiFi/Ethernet

- MiniPCIe socket
- 2.4Ghz WiFi/100 Base-T
- RS485



WiFi HaLow

- Azurewave HM610
- nrc7394/nrc7292

SBC700 + TEMPHAWK v3



Temperature
Humidity
CO2
Lumination

WiFi Halow



4G

Cloud
Service



Frozen Warehouse

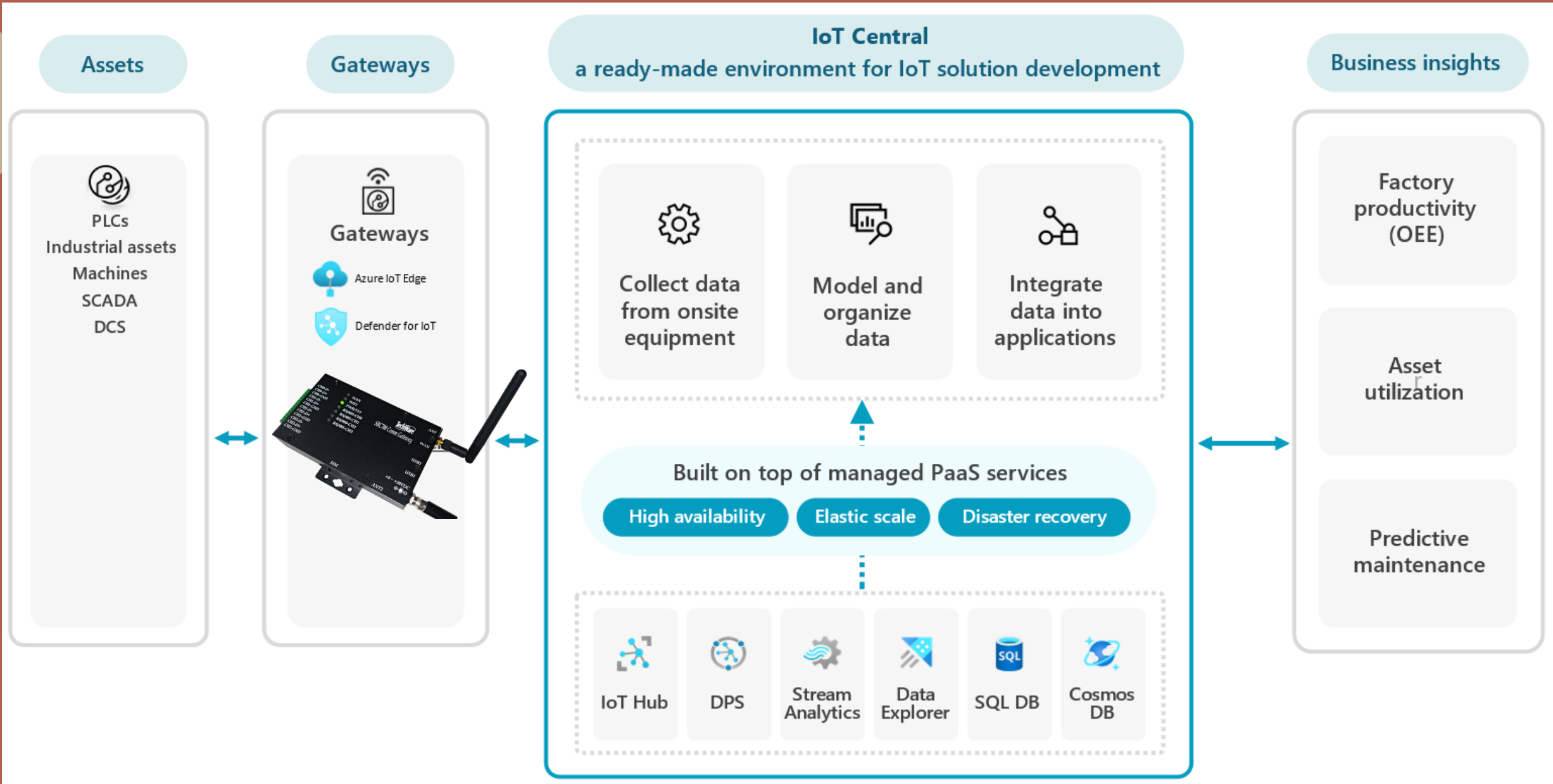


Chicken Farm



Orchid Garden

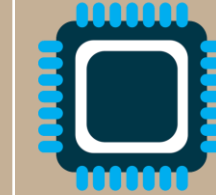
Azure IoT Cloud Service



WiFi HaLow Bluetooth Control Device - HaloBlue



Support Machine Learning to be AI Edge device



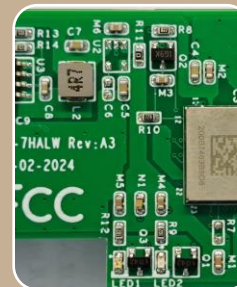
Bluetooth Processor

- nRF52840
- 1MB Storage
- zephyr Real Time OS



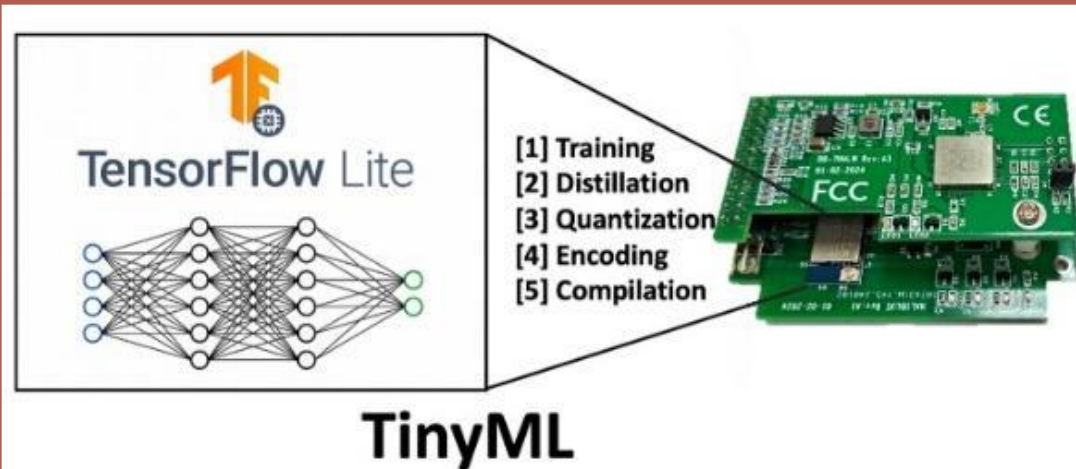
Multi-IO functions

- Bluetooth v5.3
- PWM dimming / I2C / SPI
- RS485 / ADC / GPIO



WiFi HaLow

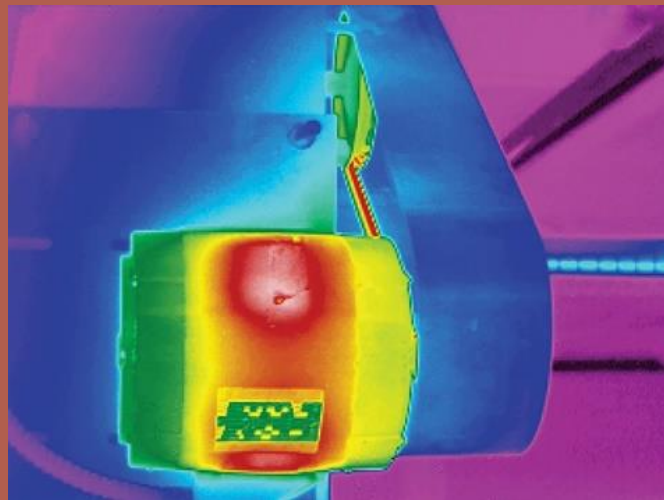
- Azurewave HM610
- nrc7394/nrc7292



HaloBlue Applications



Thermal Image



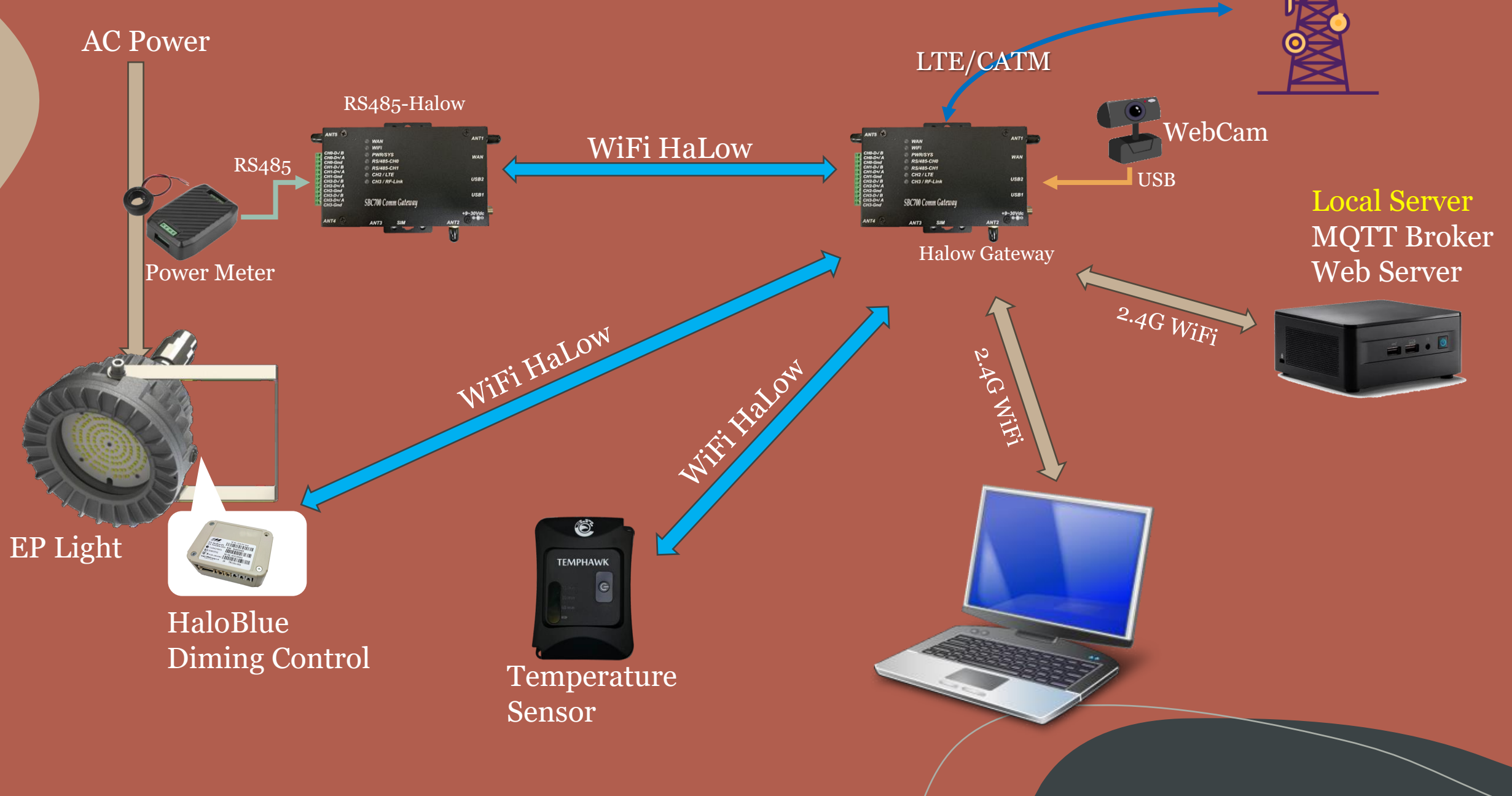
Exposure-proof Light



Weather Station



WiFi Halow on Industrial Environment Case Study

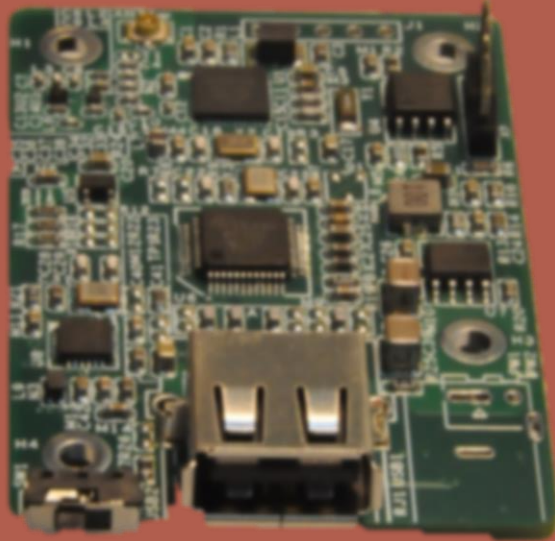


Ethernet to WiFi HaLow Bridage – **Eth-Halo**

USB to WiFi HaLow Dongle – **USB-Halo**

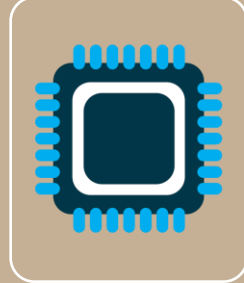


Eth-Halow



USB-Halow

Under Developing, Expect to launch in Q3



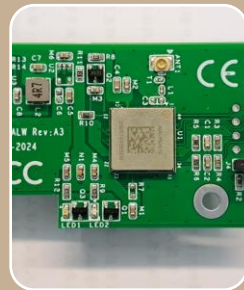
Processor

- NRC7394
- 4MB Storage
- FreeRTOS / Newracom SDK



Functions

- RJ45 / 100 BaseT Ethernet
- USB 2.0 ECM/RNDIS
- AP / STA Mode
- Bridge / NAT



WiFi HaLow

- NRC7394
- 10/100 BaseT Ethernet
- USB 2.0



感謝您

ありがとう

Thank you

Zebra Chen

www.techware.com.tw