ESMT

**Low Cost, High Performance
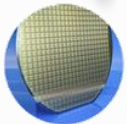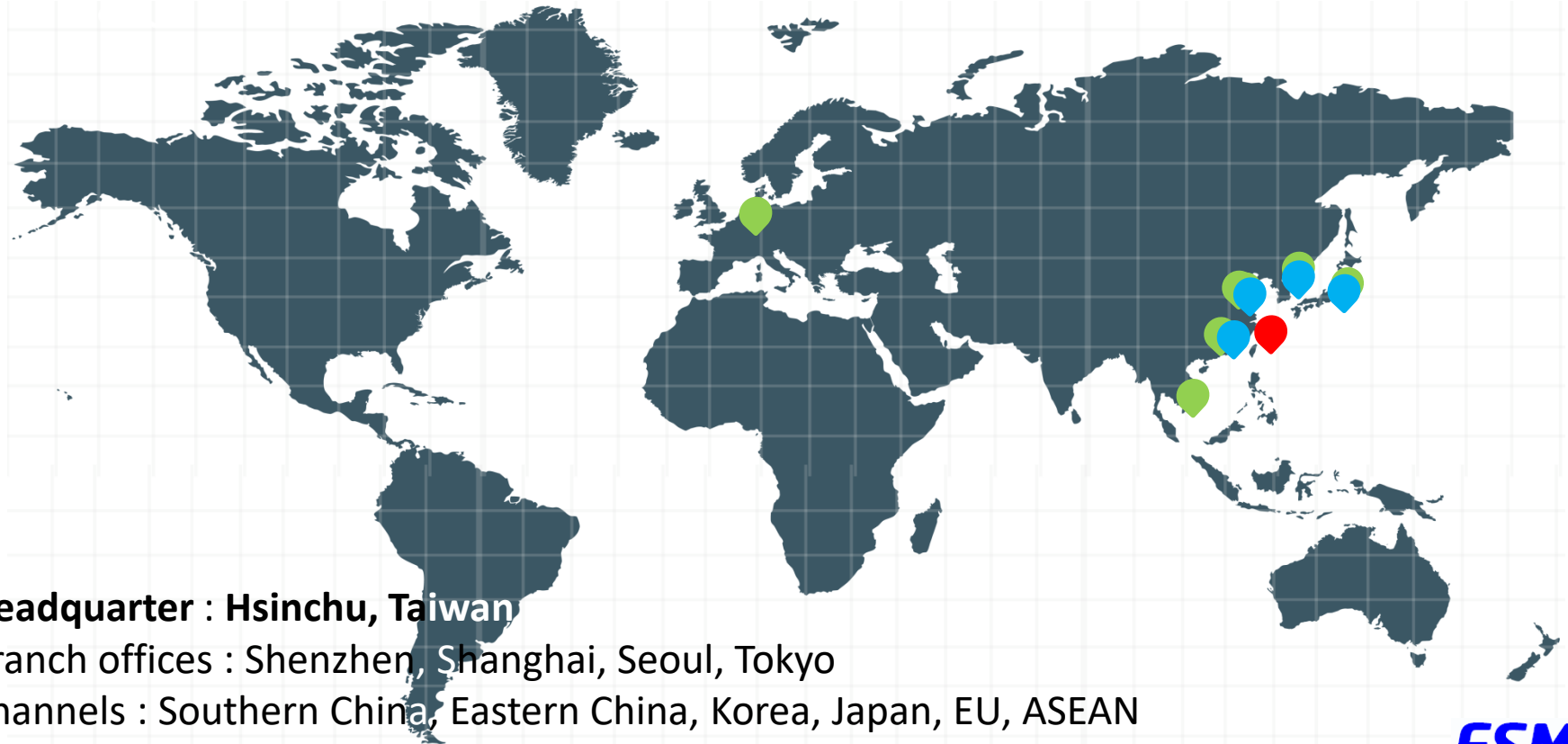and Disposable**

IoT solution for Logistics

Elite Semiconductor
Microelectronics Technology

- **Fabless Design house based in Taiwan**
- **Established in 1998**
- **TSE listed in 2002/3**
- **500+ Employee**
- **$74M capital, $400M revenue 2019**
- **Memory IC, Mix Signal IC, Wireless IC**

ESMT worldwide

Headquarter : **Hsinchu, Taiwan**
Branch offices : Shenzhen, Shanghai, Seoul, Tokyo
Channels : Southern China, Eastern China, Korea, Japan, EU, ASEAN

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Target Logistic Sectors

- **Parcel tracking**

- **Seafood and agricultural product freshness**

- **Vaccines or pharmaceutical products viability**

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Cost-Saving Solution

Antenna & PCB Design

Cold Chain Experience

Single Chip SoC

Low Cost Disposable Solution

Highly Cost effective Ecosystem

ESMT
XS8001
18490

ESMT

Solution Line Up

TriGo

Parcel

Description :
Designed for parcel tracking during transportation . Single-use Sigfox device with extremely low cost. Single button operation makes activation and deactivation extremely simple.

Feature :
* **RC1234567** Compliant
* Uplink **Class 0u** for all zones
* Temp. detecting accuracy of ±**3.0** ℃
* Battery life : 30 days (max.)
* Temp. logging up to **144** entries each day
* Dimension : 75mm x 37mm x 17mm
* Operating Temp. : -10℃ ~ 60℃

SenLog

Grocery

Description :
Designed for tracking the ambient temperature around the packages during transportation in **logistics** services. Single button operation makes activation and deactivation extremely simple.

Feature :
* **RC1234567** Compliant
* Uplink **Class 0u** for all zones
* Temp. detecting accuracy of ±**1.0** ℃
* Battery life : 30 days (max.)
* Configurable temp. threshold
* Temp. logging up to **288** entries each day
* Micro USB for data logger dumping
* LEDs : Green for device activation ;
          Red for abnormal temp.
* Dimension : 75mm x 37mm x 17mm
* Operating Temp. : -10℃ ~ 60℃

SenLog-Pro

Cold Chain

Description :
Designed for tracking the ambient temperature around the packages during transportation in **cold chain** services. Single button operation makes activation and deactivation extremely simple.

Feature :
* **RC1234567** Compliant
* Uplink **Class 0u** for all zones
* Temp. detecting accuracy of ±**0.5** ℃
* Battery life : 30 days (max.)
* Configurable temp. threshold
* Temp. logging up to **576** entries each day
* Micro USB for data logger dumping
* **Firmware customization service**
* LEDs : Green for device activation ;
          Red for abnormal temp.
* Dimension : 75mm x 37mm x 17m
* Operating Temp. : -10℃ ~ 60℃

sigfox

ESMT

TriGo : Parcel Tracking

Benefit
* Low Operating Cost :
  - Low Cost Device
  - No Mini/Micro Station
  - Long Battery Life
  - Carbon Zinc Battery
  - Recyclable
* Temperature Sensor :
  - Accuracy : ±3.0C°
* Data Logger :
  - 144 per day

Real-Time Tracking & Monitoring

Device fit onto or inside the parcel

Parcel *opened ,delivered* or item *consumed*

* Supplier
* Online store
* Logistic
* Advertising

(Scenario)

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SenLog : Temp. Monitor

Benefit

* Low Operating Cost :

  - Low Cost Device

  - No Mini/Micro Station

  - Long Battery Life

  - Carbon Zinc Battery

  - Recyclable

* Temperature Sensor :

  - Accuracy ±1.0C°

  - Configurable Threshold

* Data Logger :

  - 288 per day

  - Micro USB Connector

Real-Time Tracking & Monitoring

Periodic **or** *Event Trigger*

Device travels inside the case with the goods.

* Supplier
* Online store
* Logistic
* Insurance
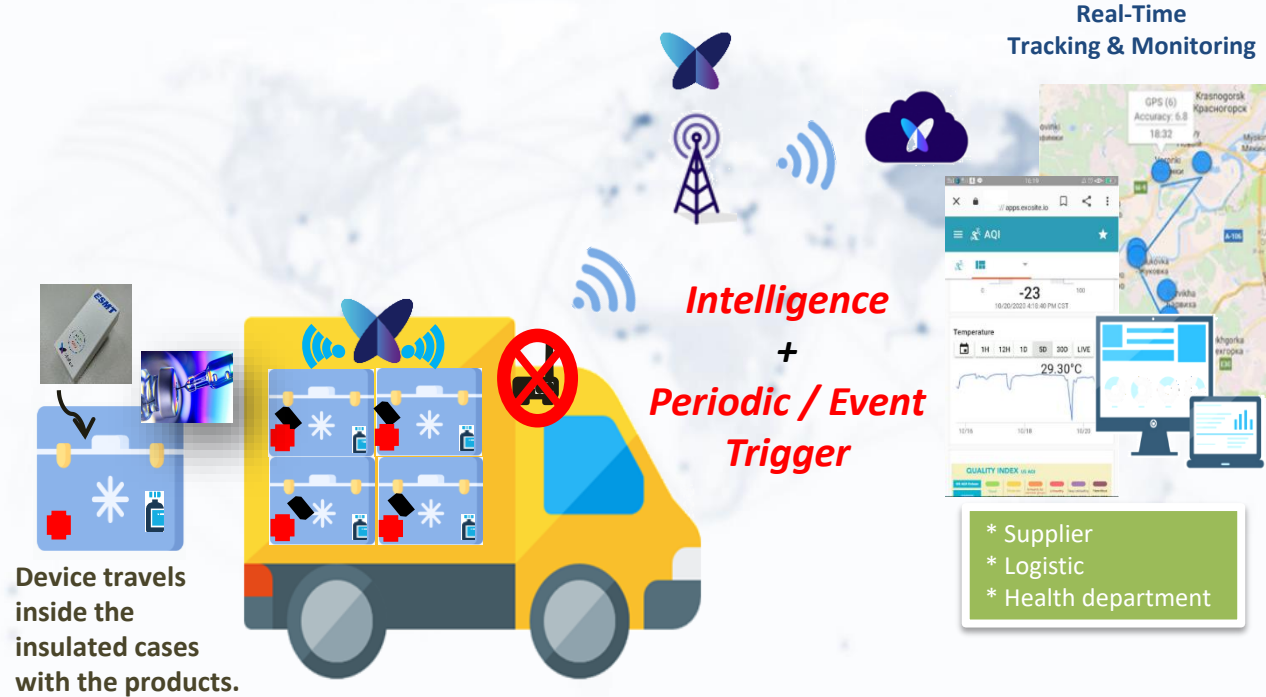
(Scenario)

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SenLog-Pro : Cold Chain

Benefit

* Low Operating Cost :
- **Low Cost Device**
- **No Mini/Micro Station**
- **Long Battery Life**
- **Carbon Zinc Battery**
- **Recyclable**

* Temperature Sensor :
- **Accuracy ±0.5C°**
- **Configurable Threshold**

* Data Logger :
- **576 per day**
- **Micro USB Connector**

* F/W Customization

Real-Time Tracking & Monitoring

Intelligence
+
Periodic / Event Trigger

Device travels inside the insulated cases with the products.

* Supplier
* Logistic
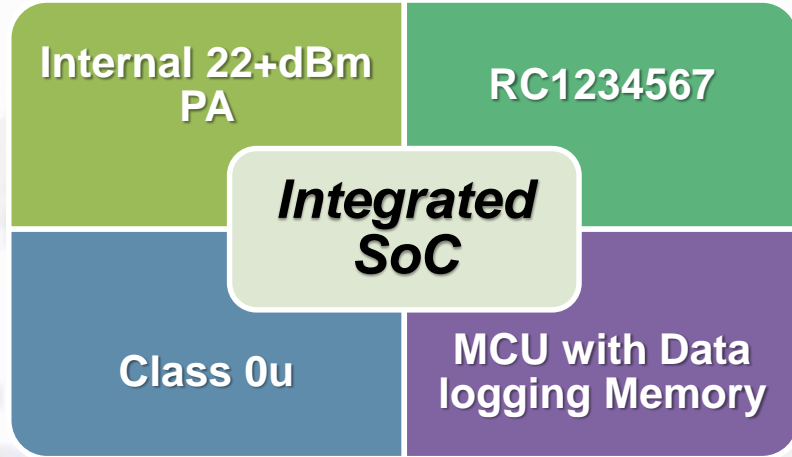* Health department

(Scenario)

ESMT

XS8001-inside Sigfox Devices

Magnetic
Pressure
$CO/CO_2/PM2.5$
Flow
Temperature
GPS
Wi-Fi/BLE

XS8001-inside Sigfox Devices

Internal 22+dBm PA	**RC1234567**
Class 0u	**MCU with Data logging Memory**

Integrated SoC

Cara-S
GPS Tracker

Cara-W
WiFi

Ready to Market

✓ Reference board/turnkey solution for Device maker

✓ End product for S.I.

Thank you

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