UHF RFID
in Electronics

Use Cases

of SYSTRONIK
Messtechnologie

Beta LAYOUT

BROOKS AUTOMATION

detego by RF-iT Solutions

KATHREIN RFID

muRata Innovator in Electronics

MAGICSTRAP® **muRata**

Use case of Systronik

R&D | Production | Logistics | Distribution | Point of Sales & Marketing | After Market | Recycling

NOW !
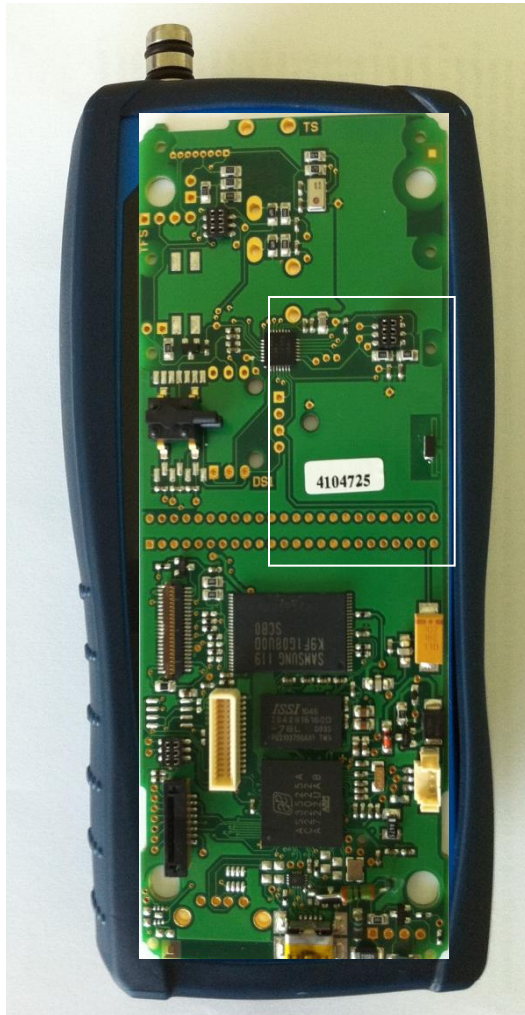
Future !
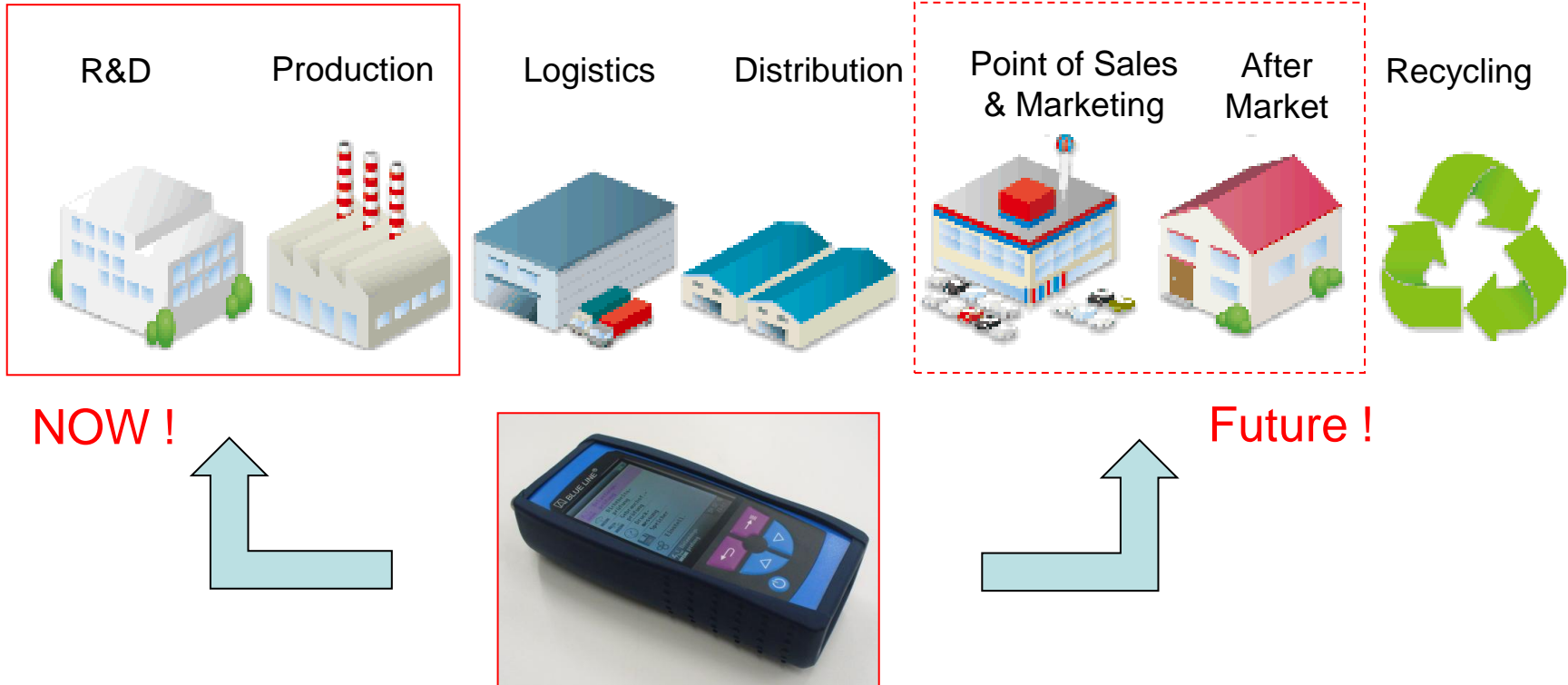
- **OEM with own production**
- **Production partially by subcontractor**
- **EAU: 10 – 50k pcs**
- **Closed loop (until now) – RFID only used in premises of OEM**

S2600 Blue Line Series

- Product:
  - Portable Gas Sensor Tightness Checker
    - for regular heating systems check in private houses

Before

Printed Serial Number on sticker

Past:

- **Printed serial number on sticker for traceability**
- **In ICT (in circuit test), serial number was written into memory of controller, by connecting device to PC and then manually typing into memory**

Problems:

- **Human Errors**
- **Sticker lost or unreadable**
- **application of sticker only at end of PCBA process (reduced traceability data)**

After
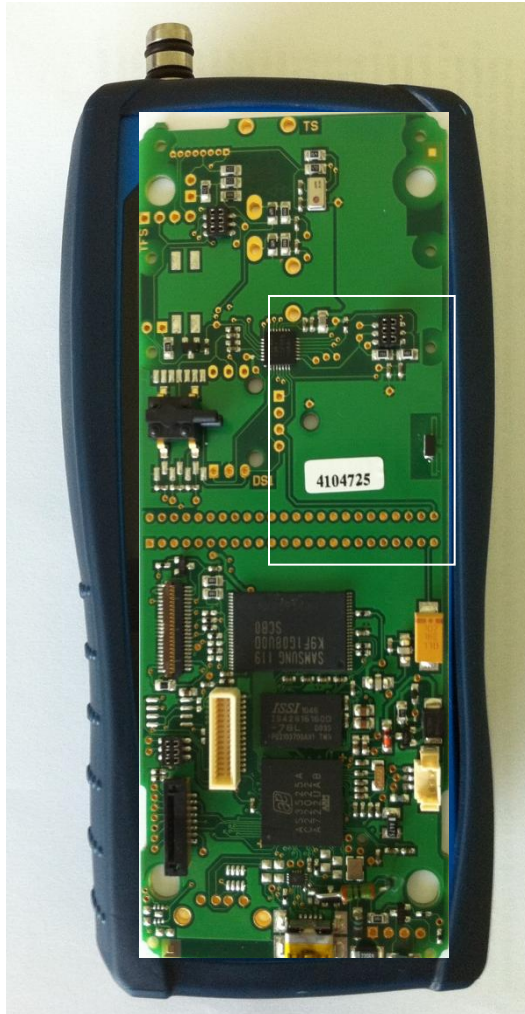
MAGICSTRAP®

on PCB

Today:
- **Magicstrap on PCB**
- **EPC linked to components in placing process**
- **Write calibration data in user memory of RFID**

Benefits:
- **Advanced traceability**
- **Calibration data available off-line and rewritable**
- **No more human errors**

Read Range

X   Z   Y

1.2m

0.1m

1.4m

0.9m

n/a

1.2m

Note: Read range is expected under 2W ERP condition from linear polarized antenna at 865MHz.

Screen shot of reader soft

Conclusion

- **All use cases primarily located in production**
- **Subcontractor using even without selling PCB for higher price to end customer**
- **Further extension of RFID use already planned**
- **Step by step evolution**
- **ROI already through improvements in this step of value chain**

MAGICSTRAP® **muRata**

And this is all just the beginning...

Beta LAYOUT

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http://www.rfid-valuecreators.com/

http://www.murata.com/products/rfid/index.html