Smart Logistics System

Monitors the progress, location and status of cargo shipments in a SMART and efficient way, allowing better information sharing with business partners.
Smart Logistics System

For Supply Chain Management and Delivery Quality

Murata Sensors have capability to detect and monitor Humidity, Temperature, Air Pressure & Vibration

Murata RFID can improve Goods traceability and Supply chain management
Smart Logistics System

Architecture Idea for Sensor Unit

- BAT
- Micro DC/DC
- MAGICSTRAP® (RFID)
- Type ZY module (BLE + ARM Cortex M0)
  - Embedded S/W (w/ SDK)
  - Built-in OTP memory (32KB)
- SPI
- Accelerometer + Gyro
- I2C
- Break-out Board for quick start

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- Sample codes for Murata sensors for Arduino, RasPi, ARM

- Humidity Sensor
- Air Pressure & Temp Sensor
- Optical Sensor (ALS)
- Murata item
- Other vendor’s item
- Available Doc/Ref/SW/HW

- GPIO interruption
- Shock Sensor
Smart Logistics System

Murata Products

**MAGICSTRAP® (RFID)**
- No antenna design
- Embedded matching network
- Life cycle traceability of electronic products

**Bluetooth® Smart Module (Type ZY module)**
- Easily controlled from 8-bit or 16-bit CPUs often used in embedded devices
- Acquired various certifications (Radio Act & Bluetooth® qualification)

**Shock Sensor**
- Piezoelectric ceramic type
- Generate an electric charge which is proportional to applied acceleration
- Wide measurement frequency band due to its high resonance frequency

**Air Pressure Sensor**
- To measure container height
- Minimal temperature drift
- Low noise
- Low current consumption

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