RENESAS RE MCU BASED “WINNING COMBOS”

RENESAS ELECTRONICS AMERICA

BIG IDEAS FOR EVERY SPACE RENESAS

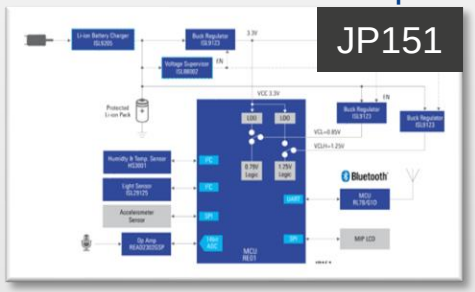
RE MCU BASED “WINNING COMBOS” & “LAB ON THE CLOUD”

- RE MCU based Winning Combos in conjunction with Renesas sensors and low power products
- Experience on-line evaluation tool “Lab on the Cloud” for the RE MCU

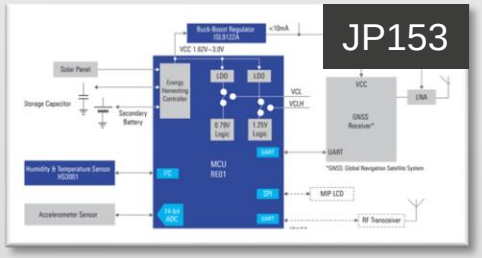
WC No.	Application
JP151	Wearable Devices with the RE01 32-Bit MCU
JP152	Structural Health Monitor
JP153	Low Power Global Navigation Satellite System (GNSS) Tracking Solution
JP087	Smart Agriculture Sensing with Energy Harvesting
EU077	Indoor Sensor for Automatic Home or Building HVAC System
EU078	Outdoor Sensor for Automatic Home or Building HVAC System

Examples

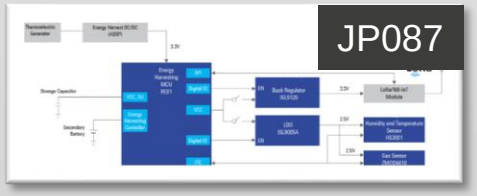
JP151



JP153



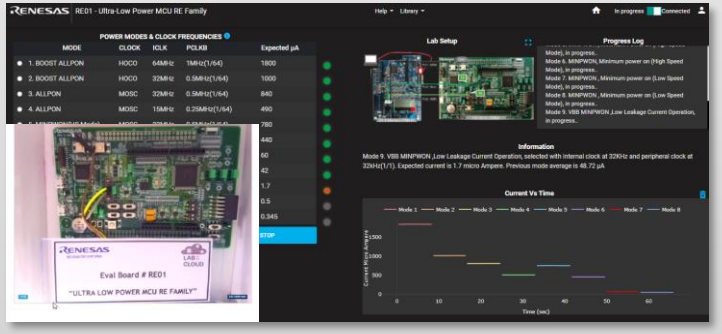
JP087



Experience the Ultra-Low Power operation of EK-RE01 online!

Lab on the cloud for RE MCU Introduction

Go to the Lab on the Cloud for RE



WEARABLE DEVICE
HIGH PERFORMANCE AND GREATLY EXTENDED BATTERY LIFE

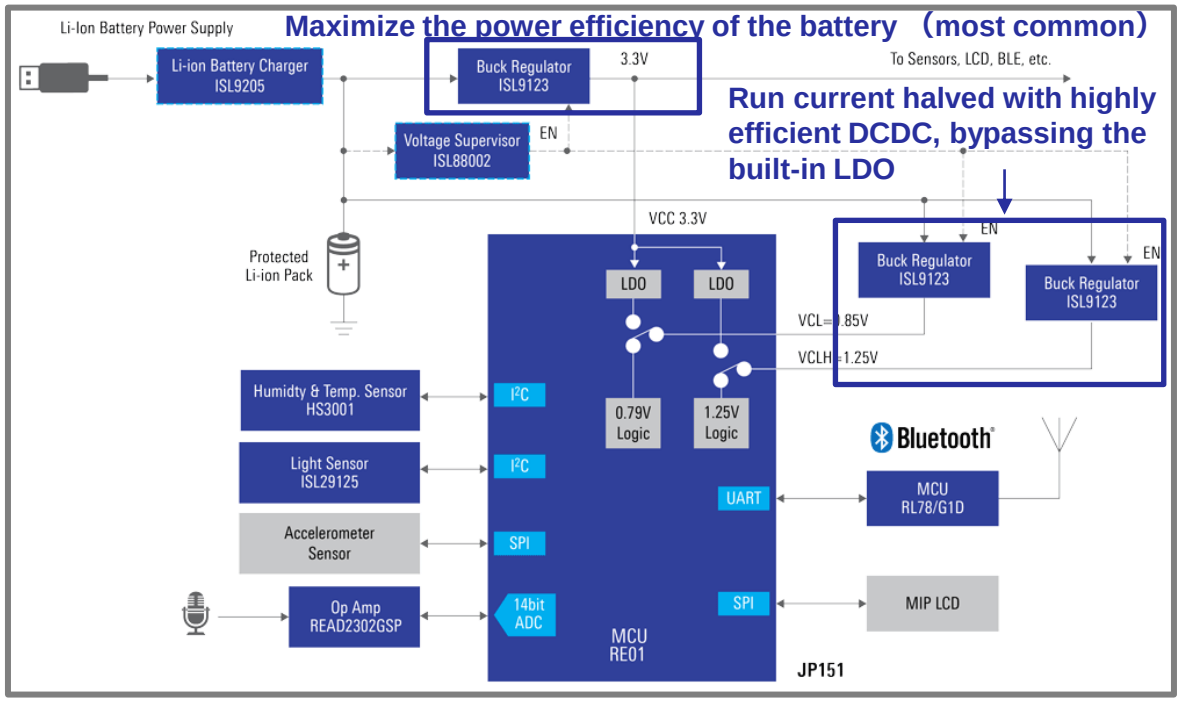
WINNING COMBOS

JP151

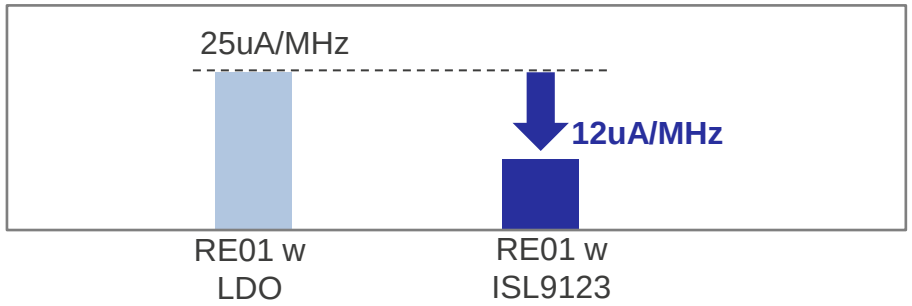
Reduced consumption of wearable devices with small battery size and long battery life.

- By Using ISL9123, the operating current of RE can be halved and the current of the system is greatly reduced.
- Obtained DIN with power supply in the Watch application. Please expand sales as a set for wearable devices.

Wearable device



ISL9123 halves RE01 operating current



Sample software

	RE01 1.5MB		RE01 256KB	
	EV Board	Sample code	EV Board	Sample code
DCDC ISL9123	Link	Link	Link	Link
DCDC ISL9122		Link		Link
Lighting sensor ISL29125	Link + Link	Link	Link + Link	TBD

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LORAWAN® IOT SENSOR BATTERY REPLACEMENT WILL BE UNNECESSARY

WINNING COMBOS

JP087/152

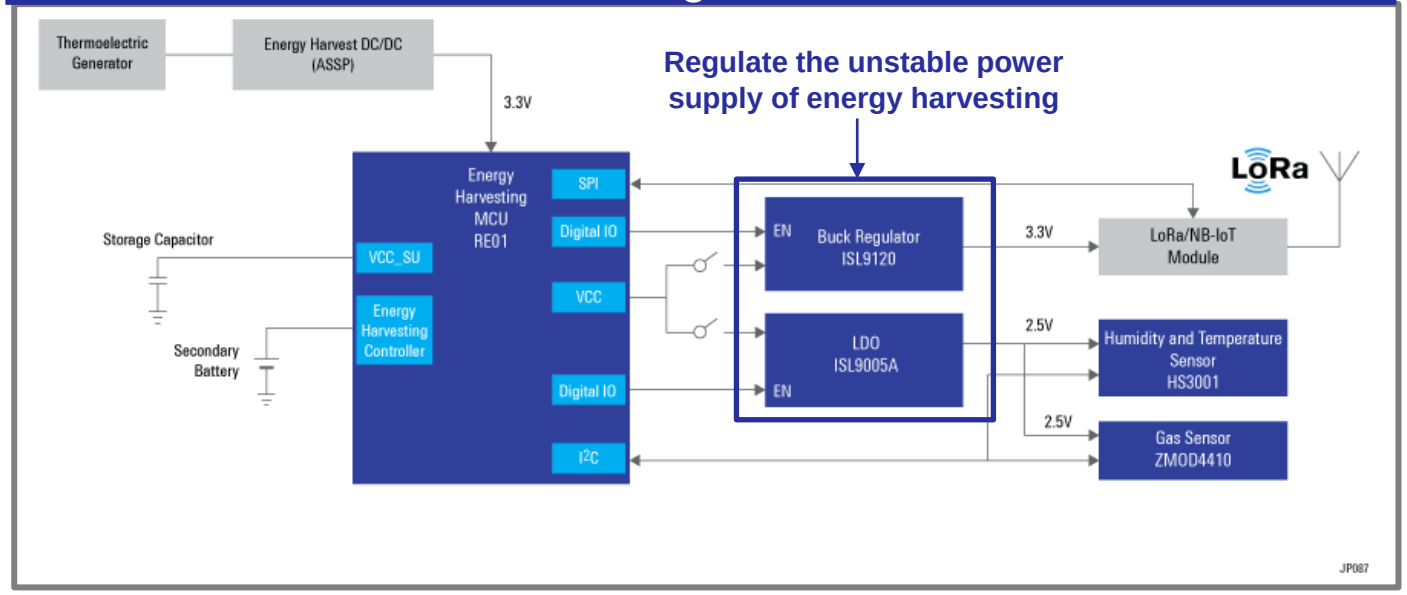
IoT sensor that operates semi-permanently without battery replacement

- Inquiries about buildings, homes, and meters increased in Europe.
- Reference design is released. It can be evaluated immediately.

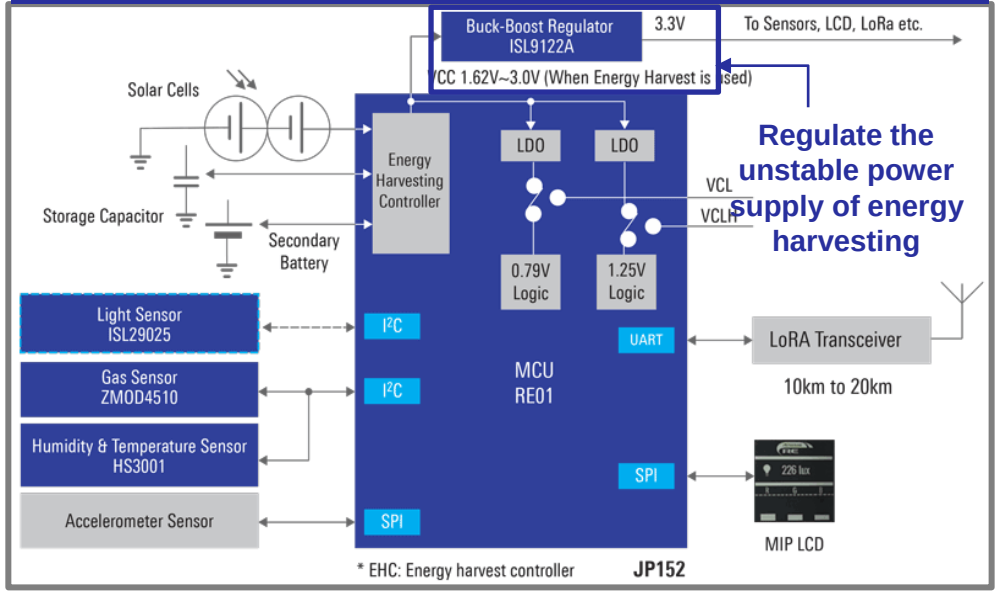
SW HW reference design

https://www.renesas.com/us/en/document/scd/re01-256kb-group-battery-maintenance-free-lorawan-sensor-energy-harvesting-application-note-sample?language=en

Smart agriculture



Structure monitor



BIG IDEAS FOR EVERY SPACE RENESAS

GPS TRACKER
BATTERY REPLACEMENT WILL BE UNNECESSARY

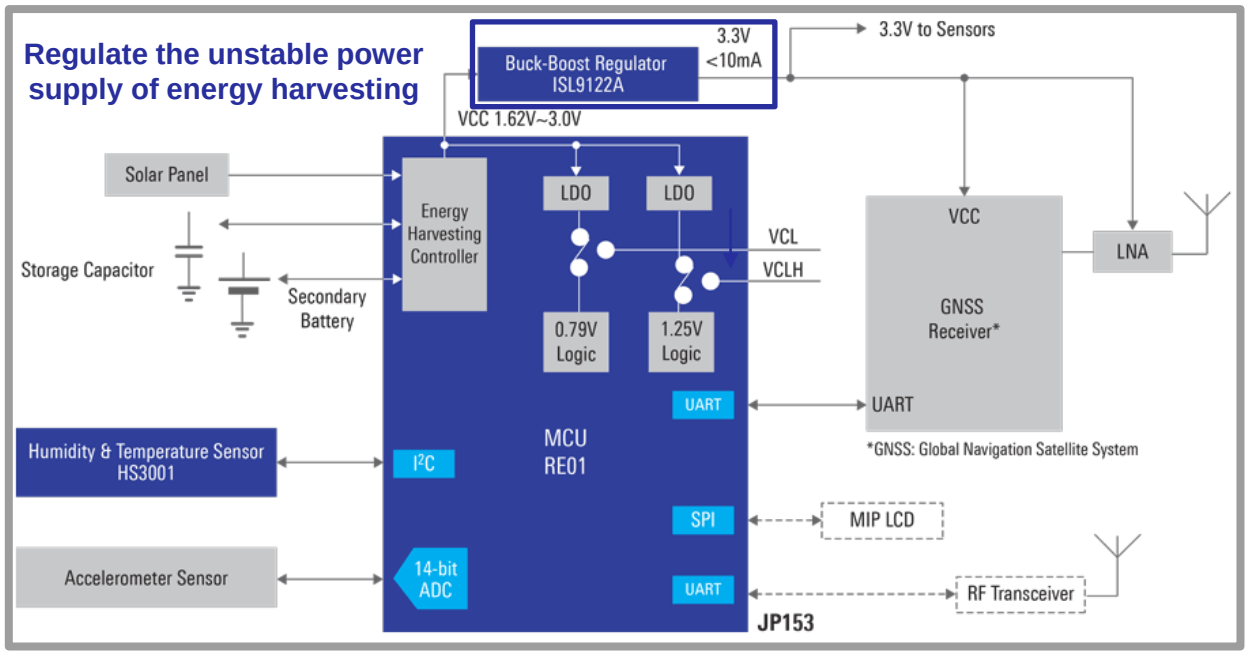
WINNING COMBOS

JP153

GPS tracker that works semi-permanently without battery replacement

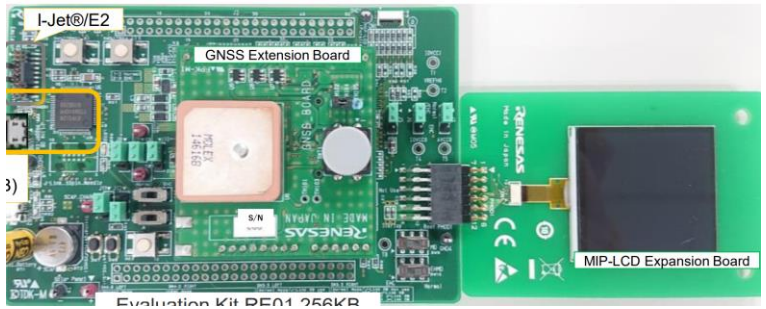
- DIN in combination with the power supply.
- Reference design is released. It can be evaluated immediately.

GPS Tracker



SW HW reference design

https://www.renesas.com/us/ja/document/apn/re01-1500kb-256kb-group-battery-maintenance-free-gps-receiver-energy-harvesting-application-note?language=en&r=1321781



BLE RE01B(SOTB) IOT SENSOR BATTERY REPLACEMENT WILL BE UNNECESSARY

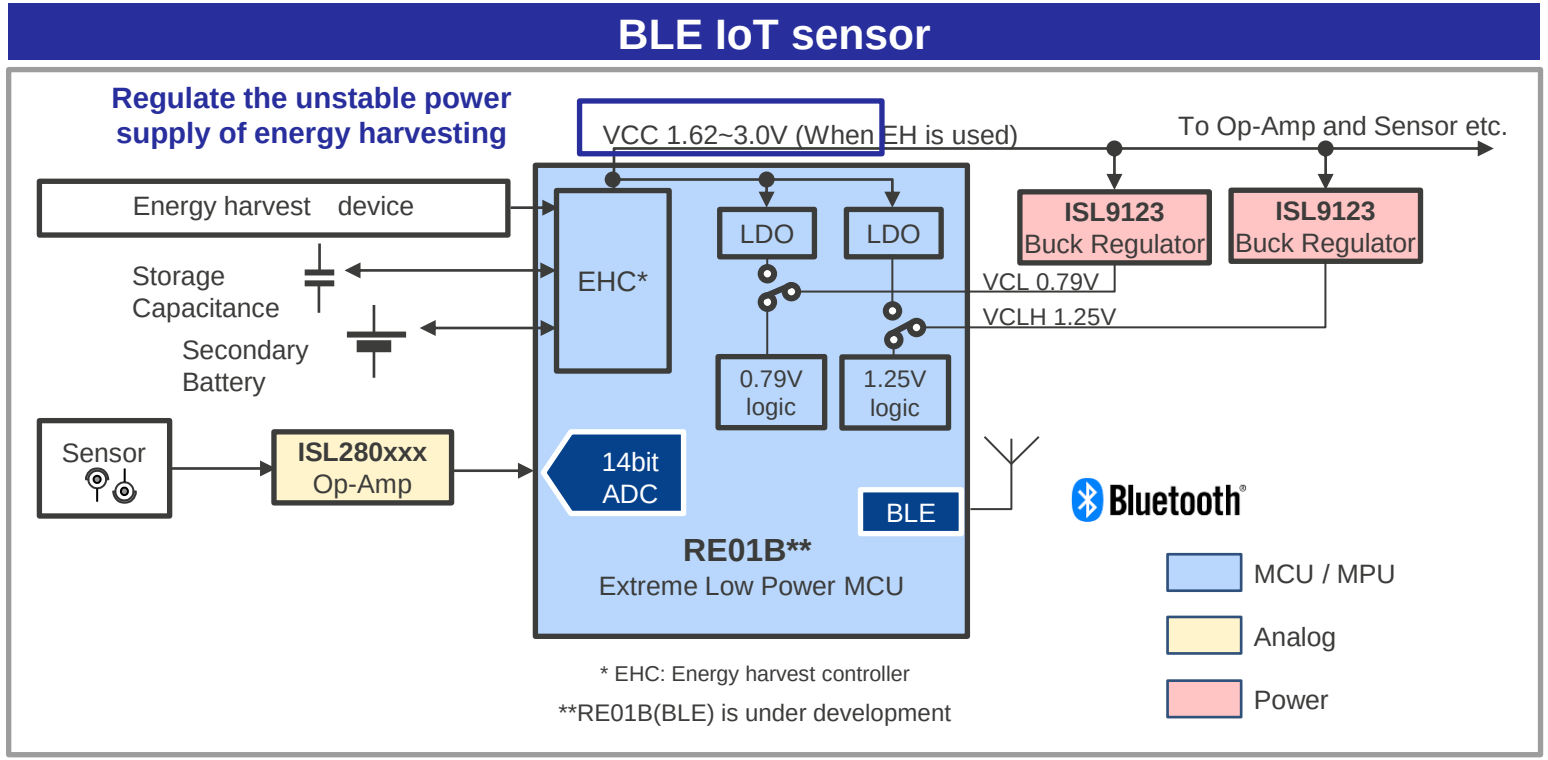
WINNING COMBOS

JP118

IoT sensor that operates semi-permanently without battery replacement

- We will expand the reference design in the future.
- Please expand promotion as a set with a power supply and a sensor.

SW HW reference design
Under consideration



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www.renesas.com