# Document Revision History

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1. Introduction

LinkIt 2523 HDK provides a low quiescent current development platform to design, prototype, evaluate and implement Internet of Things (IoT) projects. This document equips you with the necessary knowledge on how to measure the LinkIt 2523 HDK's power consumption. The guide covers the MT2523G and the MT2523D integrated chipsets. Both chipsets share the same features and pin assignments, except the MT2523D does not support GNSS functionality.
2. Hardware Description

The power source connection diagram of the LinkIt 2523 HDK is shown in Figure 1. The voltage range at the VBAT_CONN, battery voltage of the external power source, connection point is in a range from 3V to 4.8V. J2001 should short at the right side (pins 1 and 2). The power consumption of the development board is the total current running through VBAT_CONN.

2.1. Power consumption measurement

There is a method to measure the total current consumption of the LinkIt 2523 HDK. Before commencing the measurement, prepare the development board. The steps in section 2.1.1, “Steps of measuring the current” will disable the Cortex Microcontroller Interface Standard Debug Access Point (CMSIS-DAP) and system reset function.

2.1.1. Steps of measuring the current

Follow these steps to measure the current on the board. The position of the resistors mentioned below is shown in Figure 2 and Figure 3.
1) Remove the resistors R1135, R9211, and R9209. These resistors are at the front side of the development board.

2) Remove the resistors R6620, R6621, R6622, R6623 and R6625. These resistors are at the back side of the HDK.

3) Attach a jumper wire to the **VBAT_CONN** to measure the current using a current probe. A current meter can also be used for this measurement.

![Figure 2. Location of the resistors R1135, R9211 and R9209](image_url)
Figure 3. Location of the resistors R6620, R6621, R6622, R6623 and R6625