



# Link Budget and Range Calculator

Release Notes

## 1 Introduction

This Release Notes show the changes of various versions of Link Budget and Range Calculator.

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## 2 Link Budget and Range Calculator v1.0

### 2.1 General

- Supports the link budget calculation of Qorvo Matter over Thread/Zigbee (IEEE802.15.4 PHY), Bluetooth® Low Energy and Ultra-Wideband (UWB) communication controllers.
- Supports connection range estimation of Line-of-Sight (LOS) and Non-Line-of-Sight (NLOS) propagation model.
- Illustrates path loss against distance plot with various path loss models.
- Showcases the reliable range increase when using Qorvo Antenna Diversity for IEEE802.15.4 and Bluetooth® Low Energy against fast fading.
- Showcases the additional range and link budget by adding a Qorvo LNA (QM14068) for UWB Channel 5 (6489.6 MHz) and channel 9 (7987.2 MHz).
- For advanced users, this tool allows manipulation of path loss model parameters.

### 2.2 Known Issues

- None



References

[1] LinkBudgetAndRangeCalculator\_v1.0.exe

Abbreviations

LOS Line-of-Sight

Important Notices

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Document History

Version	Date	Section	Changes
1.00	5 Mar 2025		Initial release – Link Budget and Range Calculator v1.0 in Qorvo website