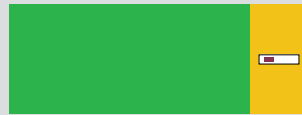
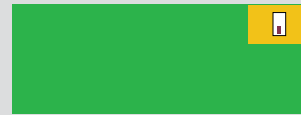


Mounting Guidelines, Selection Info, & Optimization Process

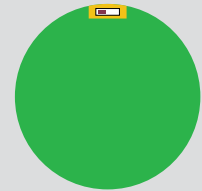
Antenna Mounting Guidelines



PCB End Mounting



PCB Corner Mounting






PCB Circular Mounting



PCB Center-Edge Mounting

Legend

	Antenna Chip		Mounting Area
	PC Board		

Selection Guide Information:

Note: Refer to the website for latest version of selection guide

Antenna Chip Selection Guide is a useful tool early in the design process when a decision on which Johanson antenna chip/s will be selected.

First, the designer must choose what type of layout is desired based on the product shape and remove allowable antenna chip placement.

The mounting plays a critical role in antenna chip selection.

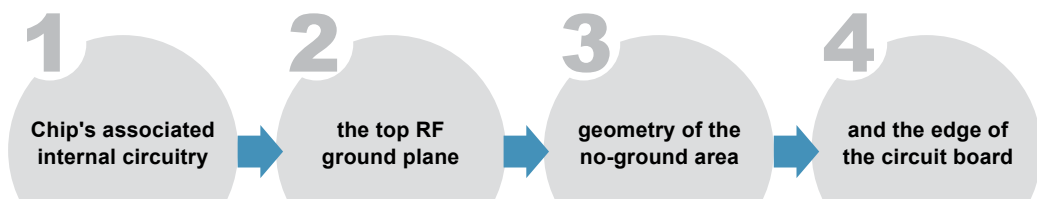
It is important that the designer understands that the "**Antenna Optimization Process**" is composed of the following:

All four of these features work together to determine the final system performance. As such, changes to the **no-ground area** or **chip locations** relative to the edge of the circuit board can result in substandard performance.

Once the layout type has been selected, then determine the application type and associated **operational frequency**.

In some cases, the selection guide will provide two antenna chip options. We have identified features that should lead the designer to a specific selection.

Antenna Optimization Process



Note: Refer to the website for latest version of selection guide

RESOURCE ► <https://www.johansontechnology.com/chip-antenna-selection>

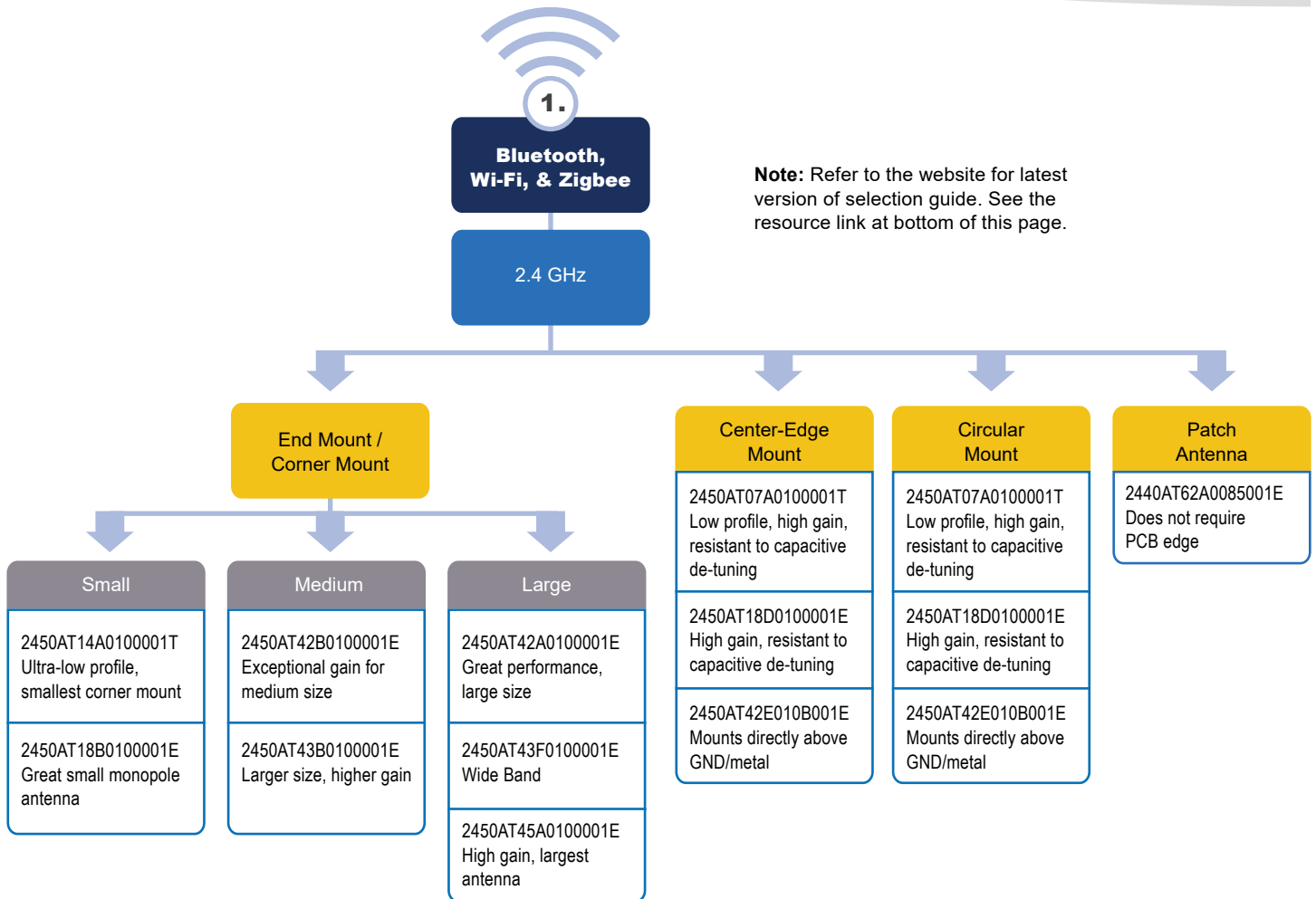
Application Legend - Bluetooth, Wi-Fi, & Zigbee Applications

Antenna Selection Guide Tool

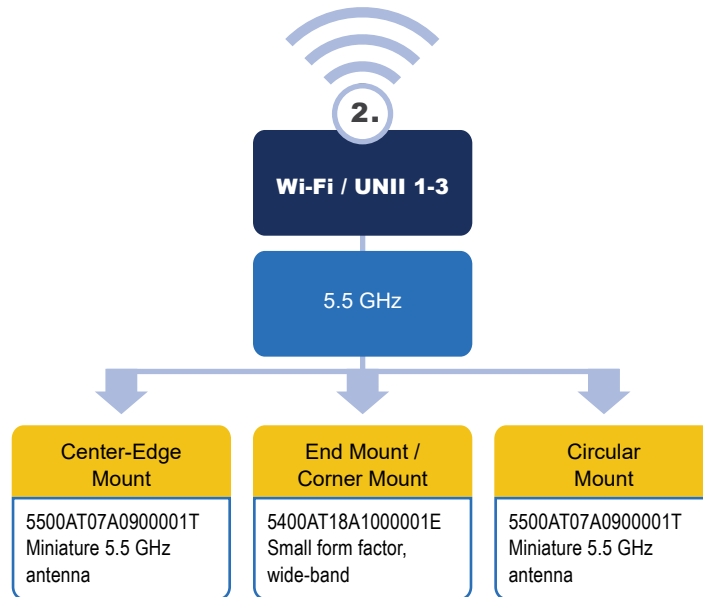
An easy to use, step-by-step tool to help you get the correct antenna chip part number, for your project design.

Legend

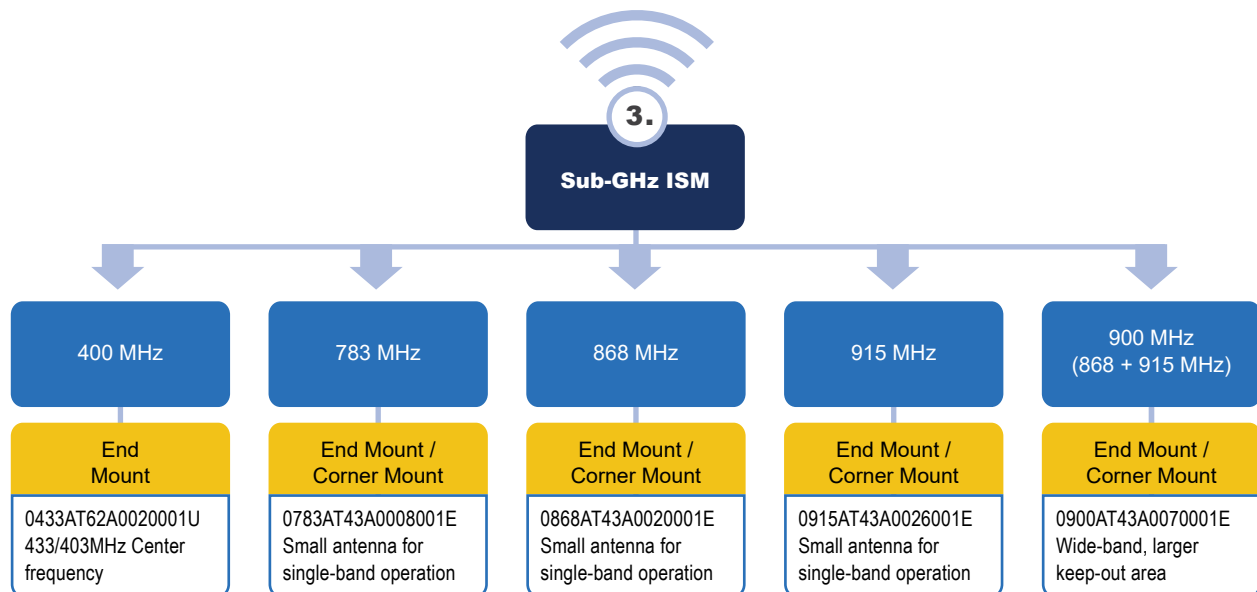
- Application Type
 1. Bluetooth / Wi-Fi / Zigbee
 2. Wi-Fi / UNII 1-3
 3. Sub-GHz ISM
 4. Dual-Band
 5. Ultra Wide-Band
- Frequency
- Mounting Location
- Physical Size
Small / Medium / Large
- Part Number Description



Wi-Fi / UNII 1-3 and Sub-GHz ISM Applications



Note: Refer to the website for latest version of selection guide. See the resource link at bottom of this page.

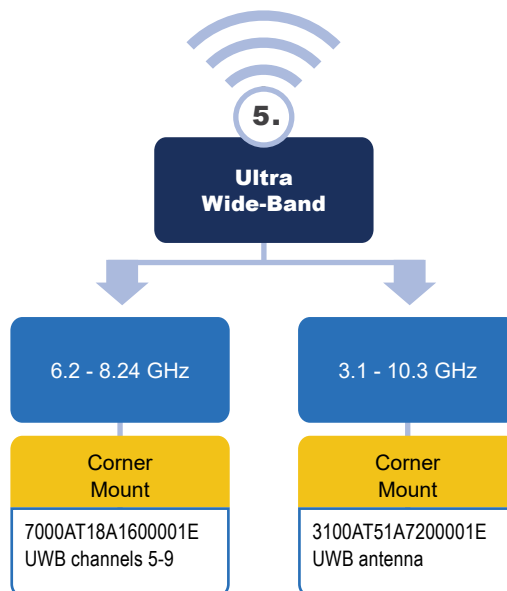
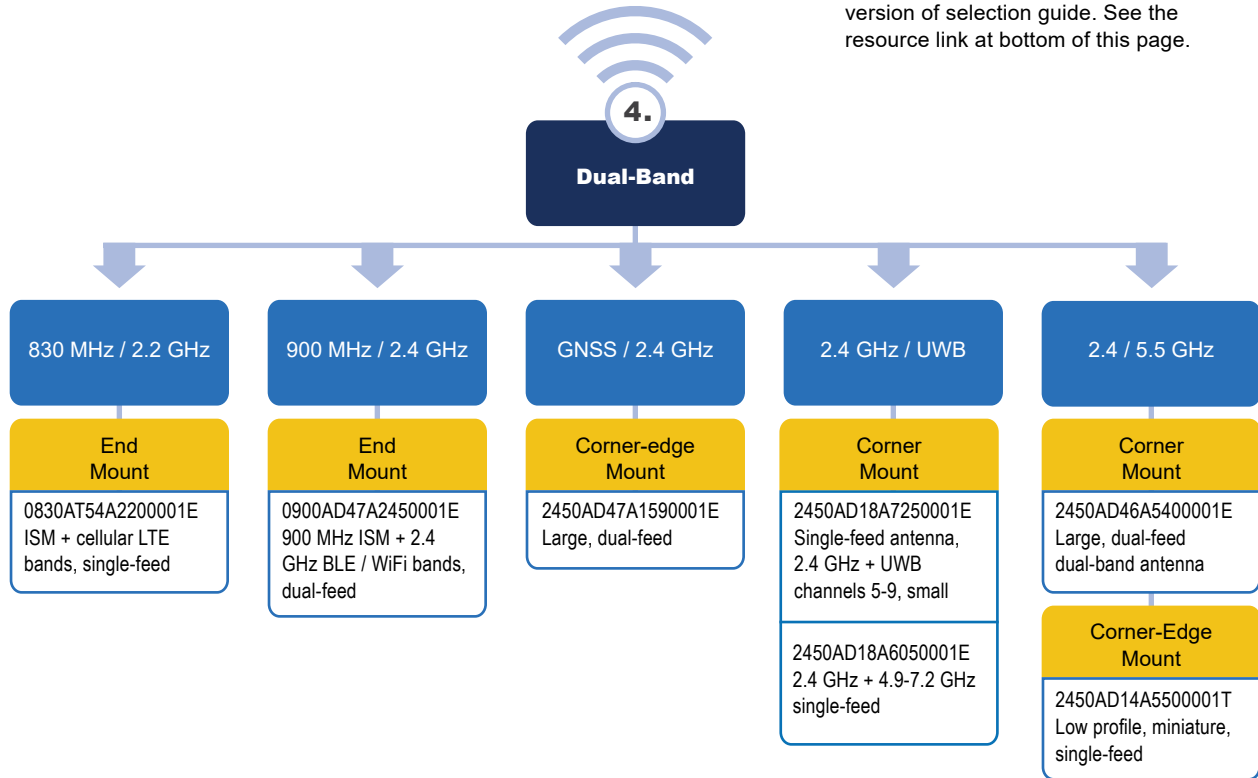


Note: Refer to the website for latest version of selection guide

RESOURCE ► <https://www.johansontechnology.com/chip-antenna-selection>

Dual-Band and Ultra Wide-Band Selections Applications

Note: Refer to the website for latest version of selection guide. See the resource link at bottom of this page.



Note: Refer to the website for latest version of selection guide

<https://www.johansontechnology.com/chip-antenna-selection>