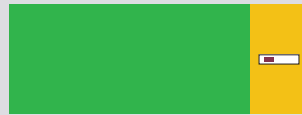
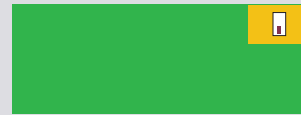


Mounting Guidelines, GNSS, Selection Info, & Optimization Process

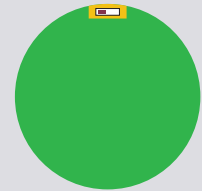
Antenna Mounting Guidelines



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

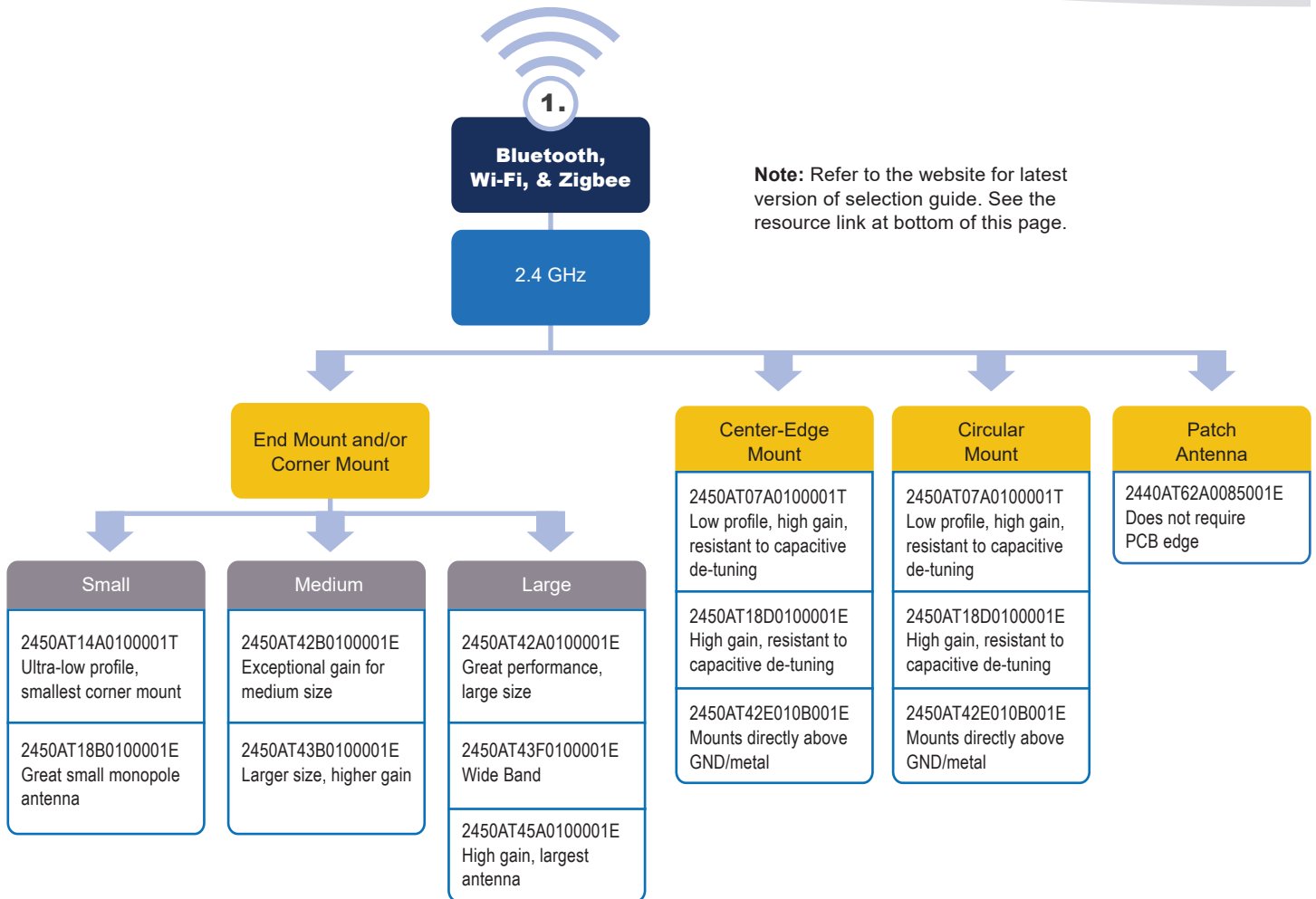


An easy to use, step-by-step tool to help you get the correct antenna chip part number, for your project design.



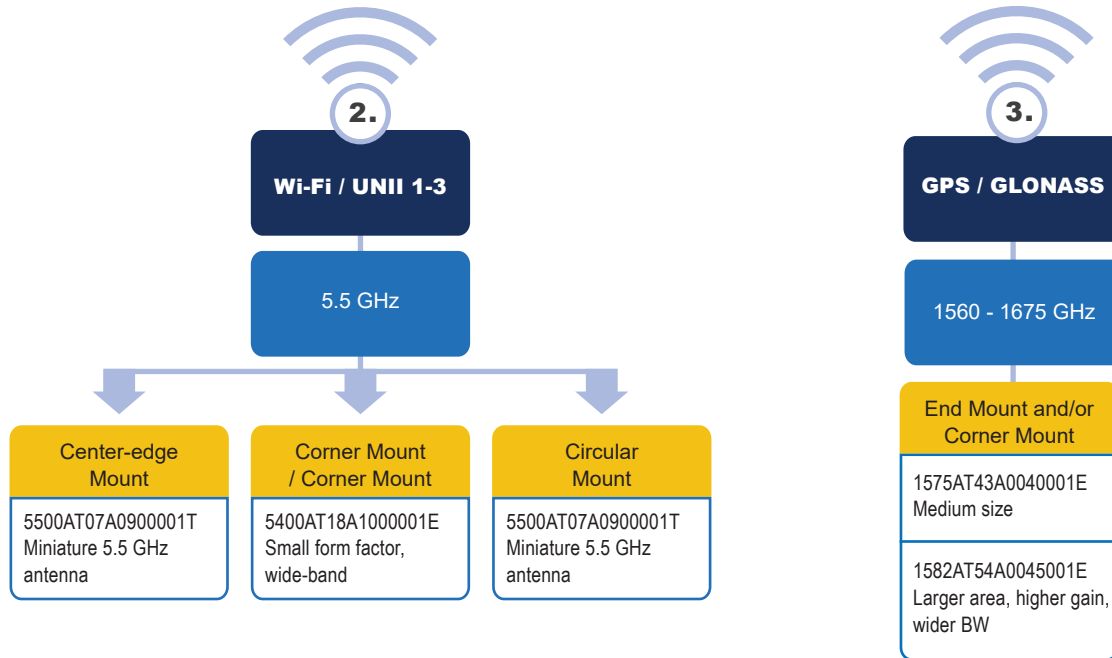
Legend

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

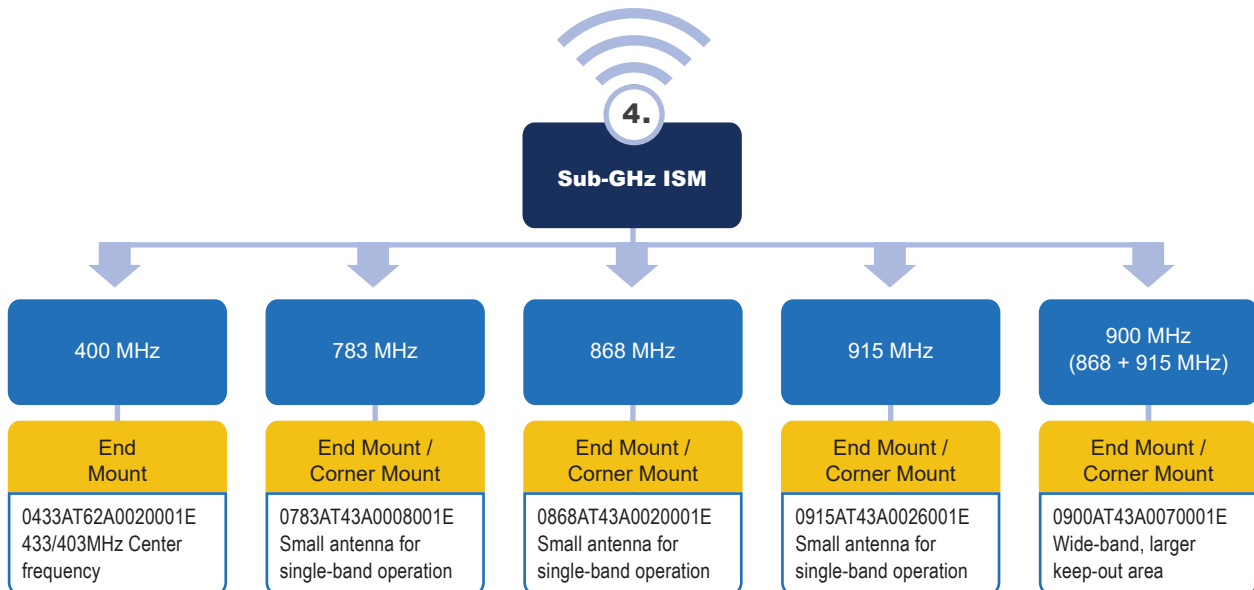


Antenna Chip Selection: Application, frequency, mount location, part number & description

Wi-Fi/UNII 1-3, GNSS, & Sub-GHz ISM



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

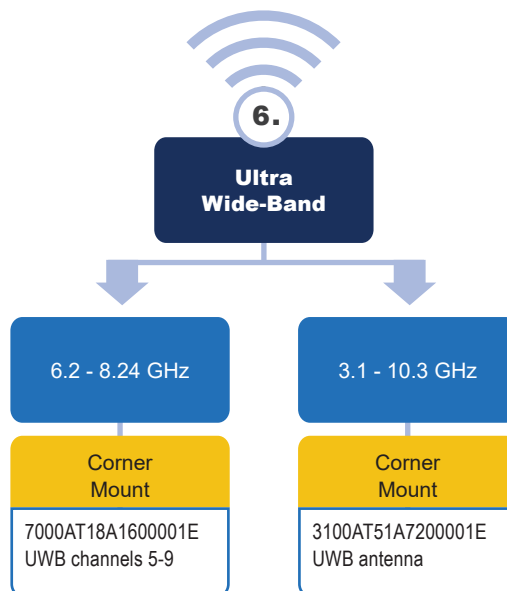
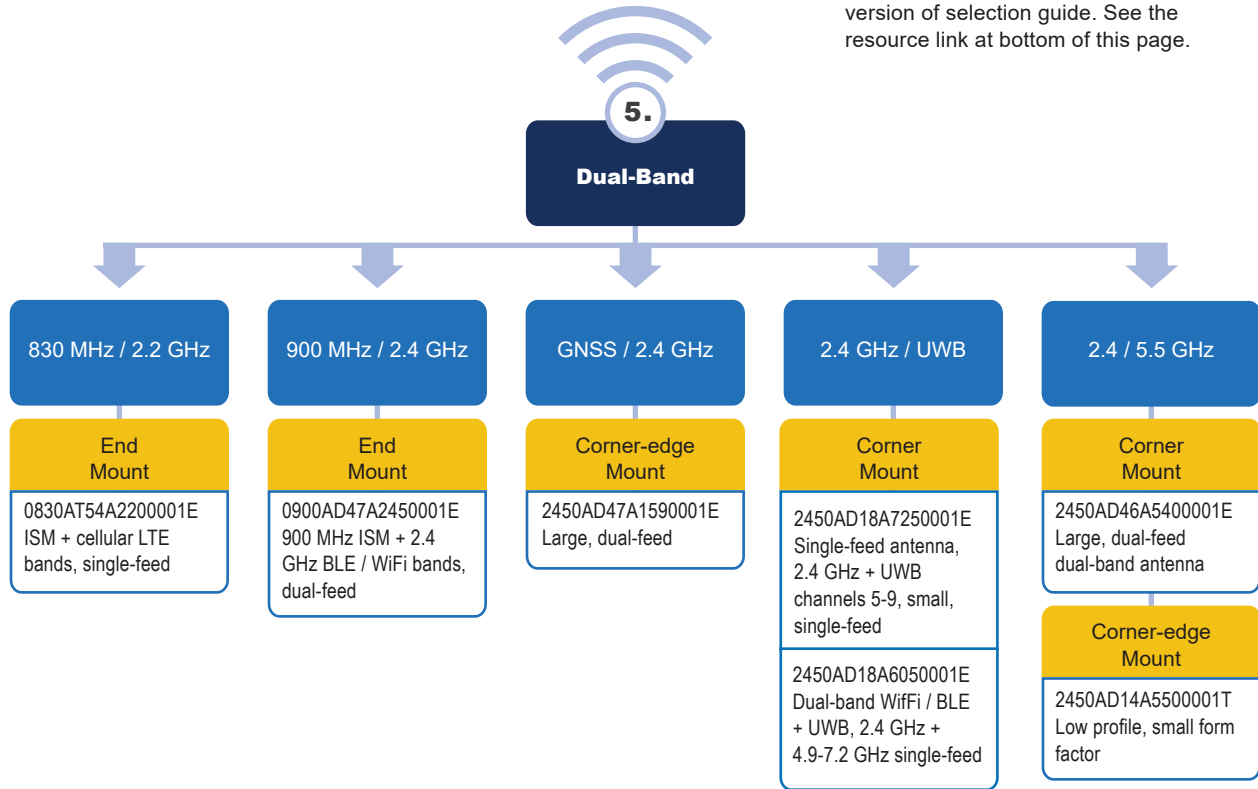


Note: Refer to the website for latest version of selection guide

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

Dual-Band, & GNSS, 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>