#### Request for Modular/Limited Modular Approval

Date: Nov. 1, 2023 Subject: Manufacturer's Declaration for ⊠ - Modular Approval ☐ - Split Modular Approval ☐ - Limited Modular Approval ☐ - Limited Split Modular Approval Confidentiality Request for: \_\_\_\_\_2AATL-6252BA-SR \_\_\_ 8 Basic Requirements – FCC Part 15.212(a)(1) For Items Marked "NO(\*)", the Limited Module Description Must be Filled Out on the Following Pages **Modular Approval Requirement** Requirement Met 1. The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with FCC limits. It is also intended to prevent coupling ✓ - YES ☐ - NO(\*) between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation. The physical crystal and tuning capacitors may be located external to the shielded radio elements. 15.212(a)(1)(i) 2. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with FCC requirements under conditions of excessive data rates or 🗵 - YES ☐ - NO(\*) over-modulation. 15.212(a)(1)(ii) 3. The modular transmitter must have its own power supply regulation on the module. This is intended to ensure that the module will comply with FCC requirements regardless of the design of the power 🗵 - YES ☐ - NO(\*) supplying circuitry in the device into which the module is installed. 15.212(a)(1)(iii) The modular transmitter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b), 15.204(c), 15.212(a), and 2.929(b). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the ⊠ - YES ☐ - NO(\*) antenna, including the cable). The "professional installation" provision of § 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph 15.212(b). 15.212(a)(1)(iv) The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to ✓ - YES ☐ - NO(\*) the module must not contain ferrites, unless they will be marketed with the module (see Section 15.27(a)). The length of these lines shall be length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified or commercially available (see Section 15.31(i)). 15.212(a)(1)(v)

Modular Approval Requirement	Require	ement Met
6. The modular transmitter must be labeled with its own FCC ID number, or use an electron display (see KDB Publication 784748).  If using a permanently affixed label with its own FCC ID number, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wordin such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.  If the modular transmitter uses an electronic display of the FCC identification number, the information must be readily accessible and visible on the modular transmitter or on the device in which it is installed. If the module is installed inside another device, then the outside of the device into which the module is installed must display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains FCC certified transmitter module(s)." Any similar wording that expresses the same meaning may be used. The user manual must include instructions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization. 15.212(a)(1)(vi)	g y ⊠ - YES	☐ - NO(*)
7. The modular transmitter must comply with all specific rule or operating requirements applicable to the transmitter, including all the conditions provided in the integration instructions by the grantee. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured. 15.212(a)(1)(vii)	✓ - YES	□ - NO(*)
8. The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensur compliance. 15.212(a)(1)(viii)	≥ ⊠ - YES	□ - NO(*)

#### **Limited Module Description – When Applicable**

\* If a module does NOT meet one or more of the above 8 requirements, the applicant may request Limited Modular Approval (LMA). This Limited Modular Approval (LMA) is applied with the understanding that the applicant will demonstrate and will retain control over the final installation of the device, such that compliance of the end product is always assured. The operating condition(s) for the LMA; the module is only approved for use when installed in devices produced by grantee. A description regarding how control of the end product, into which the module will be installed, will be maintained by the applicant/manufacturer, such that full compliance of the end product is always ensured should be provided here.

Details: <example - N/A>

Software Considerations – KDB 594280 / KDB 442812 (One of the following 2 items must be applied)				
Requirement	Requirement Met			
<ol> <li>For non-Software Defined Radio transmitter modules where software is used to ensure compliance of the device, technical description must be provided about how such control is implemented to ensure prevention of third-party modification; see KDB Publication 594280.</li> </ol>	□ - Provided in Separate     Cover Letter	□ - N/A		
<ol> <li>For <u>Software Defined Radio (SDR)</u> devices, transmitter module applications must provide a software security description; see KDB Publication 442812.</li> </ol>	☐ - Provided in Separate Cover Letter	⊠ - N/A		

Split Modular Requirements					
Requirement Provided in Manual		ual			
<ol> <li>For split modular transmitters, specific descriptions for secure communications between front-end and control sections, including authentication and restrictions on third-party modifications; also, instructions to third-party integrators on how control is maintained.</li> </ol>	☐ - Provided in Separate Cover Letter	⊠ - N/A			

	OF	M Integration Many	ual Guidance – KDB 996369 D03 Section 2			
	OE	M Integration Man	ual Guidance – KDB 990309 D05 Section 2			
	Clear and Spe	cific Instructions De	escribing the Conditions, Limitations, and Proced	ures		
			nd/or integrate the module into a host device.			
		Т				
Requir	ement					
			□ - No,			
			If No, and LMA applies, the applicant ca			
l				make the following detailed info public. However there still needs to be basic integration instructions for a users manual and the		
Is this module		🗵 - YES	information below must still be inclu			
sale to third p	varties?		description. If the applicant wishes to ke			
			this will require a separate statement co			
			module is not for sale to third partie			
	Itom	a magninad ta ba in tl	instructions are internal confide he manual – See KDB 996369 D03, Section 2	nual documents.		
As of May 1			ving information to be in the installation manual.	Modular transmitter		
			ons for all these items indicating clearly when the			
			licate "Not Applicable". Also if a module is limite			
products and no			user instructions may not need to be detailed and			
1 1			on, but this should include a cover letter as cited	above.		
a.		DB 996369 D03, Sect ated to the transmitter				
	•		DB 996369 D03, Section 2.3			
a.			cable loss, reduction of power for point to point			
•••		onal installation info	enote 1000, reduction of power for point to point			
3. Limited Mod		DB 996369 D03, Secti	on 2.4			
a.			intee uses to verify the host meets the necessary			
1	limiting condition			□ - All Items shown to		
b.			sary, state how control will be maintained such ass II for new hosts, etc.	the left are provided in		
4 Trace antenna		6369 D03, Section 2		the Modular Integration		
a.			na, connectors, isolation requirements, tests for	Guide (or UM) for Full		
			t procedures for ensuring compliance. If	Modular Approval (MA) or LMA.		
			confidential must be identified and information	of LWA.		
5 DE		perational description		☐ - An LMA applies		
-		B 996369 D03, Sections of	on 2.6 that allow host manufacturers to use the module.	and is approved ONLY		
a.			y: first to the host manufacturer to define	for use by the grantee in		
			rom body) and second additional text needed to be	their own products, and		
		nd user in the host pro	oduct manuals.	not intended for sale to		
	DB 996369 D03, Se			3 <sup>rd</sup> parties as provided in a separate cover letter.		
a.			ation and all applicable professional installer nna list shall also identify the antenna types	Therefore the		
			at "omni-directional" is not considered a type)	information shown to the		
7. Label and cor		on. KDB 996369 D03		left is found in the		
a.	-		ed to provide a physical or e-label stating	theory of operation.		
		D: " with their finished				
			irements. KDB 996369 D03, Section 2.9			
a.	a. Test modes that should be taken into consideration by host integrators including					
b.	clarifications necessary for stand-alone and simultaneous configurations.  b. Provide information on how to configure test modes for evaluation					
			3 996369 D03, Section 2.10			
Sincerely,			7 \ 16.			
			Jim Hu			
By:	_ Jim Hu / Man					
	(Signat	ture/Title <sup>1</sup> )	(Print name)			

<sup>&</sup>lt;sup>1</sup> - Must be signed by applicant contact given for applicant on the FCC site, or by the authorized agent if an appropriate authorized agent letter has been provided. Letters should be placed on appropriate letterhead.