Request for Modular/Limited Modular Approval

Date: May 16,2023		
Subject: Manufacturer's Declaration for ⊠ - Modular Approval □ - Split Modular Approval □ - Limited Modular Approval □ - Limited Split		approval
Confidentiality Request for:2AATL-6252B-PR		
8 Basic Requirements – FCC Part 15.212(a)(1) For Items Marked "NO(*)", the Limited Module Description Must be Filled Out on the Fol	llowing Page	3
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 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)	⊠ - YES	□ - NO(*)
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 over-modulation. 15.212(a)(1)(ii)	⊠ - YES	□ - NO(*)
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 supplying circuitry in the device into which the module is installed. 15.212(a)(1)(iii)	⊠ - YES	□ - NO(*)
4. 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 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)	⊠ - YES	□ - NO(*)
5. 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 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	⊠ - YES	□ - NO(*)

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	Requirement Met	
K If the interpretation of the interpretati	The modular transmitter must be labeled with its own FCC ID number, or use an electron display (see EDB 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 wording use 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 ither 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 equirement. In the latter case, a copy of these instructions must be included in the application for quipment 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 vording such as the following: "Contains FCC certified transmitter module(s)." Any similar wording mat expresses the same meaning may be used. The user manual must include instructions on how to coess the electronic display. A copy of these instructions must be included in the application for quipment authorization. 15.212(a)(1)(vi)	⊠ - YES	□ - NO(*)
tr oi th au oj	The modular transmitter must comply with all specific rule or operating requirements applicable to the ransmitter, 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, here 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 peration 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(*)
F(1: rc sp in 1: sp	The modular transmitter must comply with any applicable RF exposure requirements. For example, CC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 5.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform outine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread pectrum 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 5, when necessary, may also need to address certain RF Exposure concerns, typically by providing pecific installation and operating instructions for users, installers and other interested parties to ensure 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	`		
1. 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.	□ - Provided in Separate Cover Letter	□ - N/A	
 For <u>Software Defined Radio (SDR)</u> devices, transmitter module applications must provide a software security description; see KDB Publication 442812. 	- Provided in Separate Cover Letter	⊠ - N/A	

Split Modular Requirements				
Requirement	Provided in Manual			
 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. 	☐ - Provided in Separate Cover Letter	⊠ - N/A		

OEM Integration Manual Guidance – KDB 996369 D03 Section 2					
Clear and Specific Instructions Describing the Conditions, Limitations, and Procedures					
for third-parties to use and/or integrate the module into a host device.					
Daguinamant					
Requirement		□ - No,			
		☐ - No, If No, and LMA applies, the applicant car	n ontionally choose to not		
		make the following detailed info public.			
Is this module intended for	or	to be basic integration instructions for a users manual and the			
sale to third parties?	□ - YES	information below must still be inclu-			
•		description. If the applicant wishes to ke			
		this will require a separate statement co module is not for sale to third parties			
		instructions are internal confider			
		nal – See KDB 996369 D03, Section 2			
		ormation to be in the installation manual.			
		all these items indicating clearly when the Not Applicable". Also if a module is limite			
		structions may not need to be detailed and			
be placed	in the operational description, but	this should include a cover letter as cited			
	iles. KDB 996369 D03, Section 2.2				
	ules related to the transmitter. perational use conditions. KDB 9963	260 D02 Section 2.2			
		ss, reduction of power for point to point			
	professional installation info	so, reduction of power for point to point			
3. Limited Module Procedu	res. KDB 996369 D03, Section 2.4				
		s to verify the host meets the necessary			
limiting co		to have control will be maintained and	□ - All Items shown to		
	liance is ensured, such as Class II for	te how control will be maintained such	the left are provided in		
	DB 996369 D03, Section 2.5	new nestes, etc.	the Modular Integration		
		nectors, isolation requirements, tests for	Guide (or UM) for Full Modular Approval (MA)		
	ification, and production test procedu		or LMA.		
	al, the method used to keep confiden in the operational description.	tial must be identified and information			
	ons. KDB 996369 D03, Section 2.6		☐ - An LMA applies		
		w host manufacturers to use the module.	and is approved ONLY		
	of instructions are necessary: first to		for use by the grantee in		
		y) and second additional text needed to be	their own products, and not intended for sale to		
6. Antennas. KDB 996369 I	o the end user in the host product ma	inuais.	3 rd parties as provided in		
	ennas included in the application and	d all applicable professional installer	a separate cover letter.		
	ns when applicable. The antenna list s		Therefore the		
		i-directional" is not considered a type)	information shown to the left is found in the		
	Formation. KDB 996369 D03, Section		theory of operation.		
	host integrators that they need to pro FCC ID: "with their finished produc				
	s and additional testing requirements				
a. Test mode	s that should be taken into considera	tion by host integrators including			
	ons necessary for stand-alone and sin				
	formation on how to configure test n 5 Subpart B disclaimer. KDB 996369				
7. Additional testing, Part 1	5 Suopart D discialifici. KDD 390309	, 1003, Section 2.10			
Sincerely,		7 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
_		Jim Hu			
By: _ Jim Hu	/ Manager_				
($\overline{\text{Signature}/\text{Title}^1}$	(Print name)			

¹ - 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.