

SPECIFICATION FOR APPROVAL

EMRight Model Name : GET-122T

Getac Mode Name : F120

EMRight P/N : 98-700-12010

Getac P/N : 412GB7600002

Ver. 0.1

Signature

EMRight approved	Customer approved
Signature:	Signature:
Date:	Date:

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Record of Revision

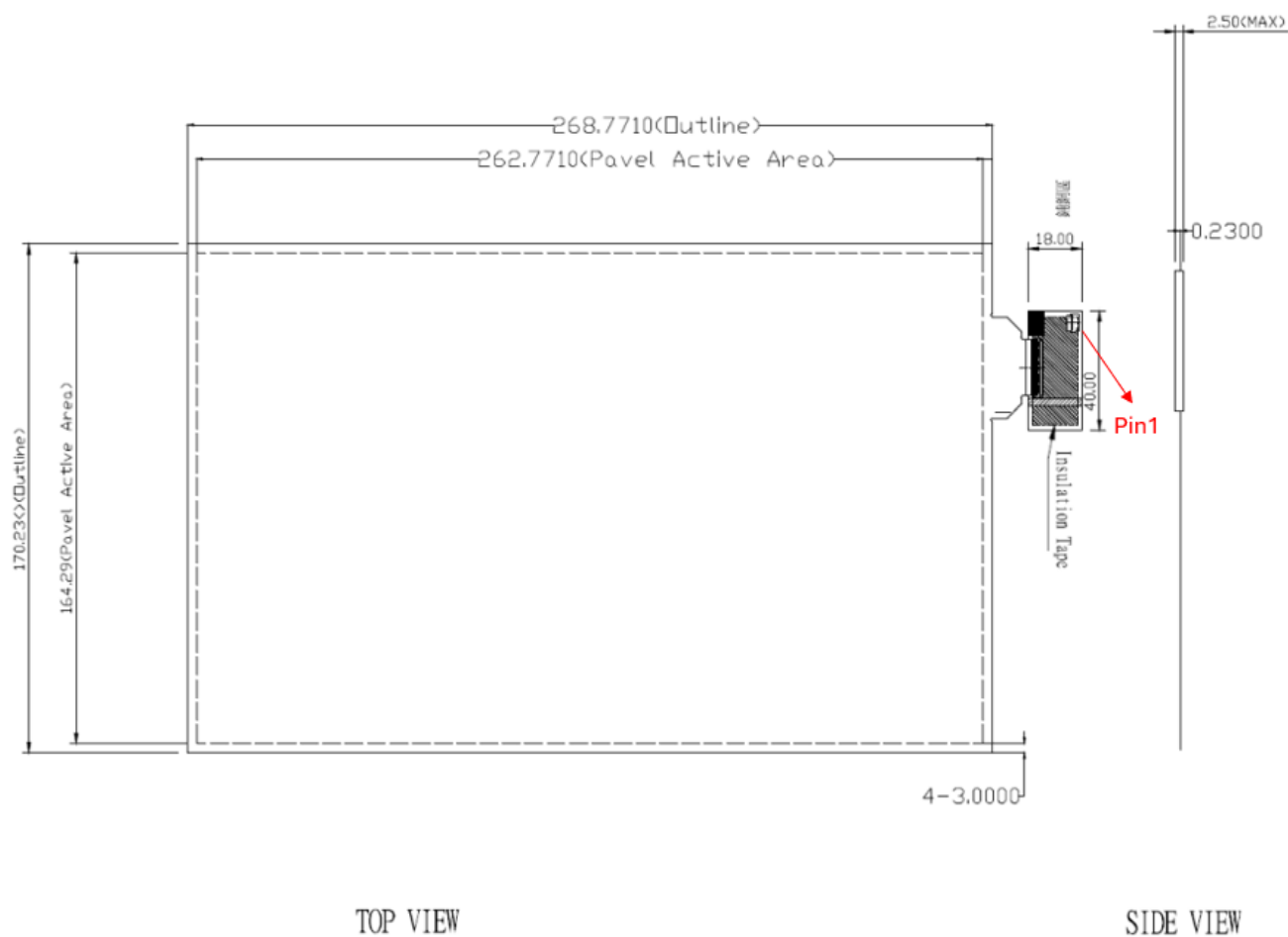
Rev.	Date	Description
V0.1	1/8/2025	Initial version

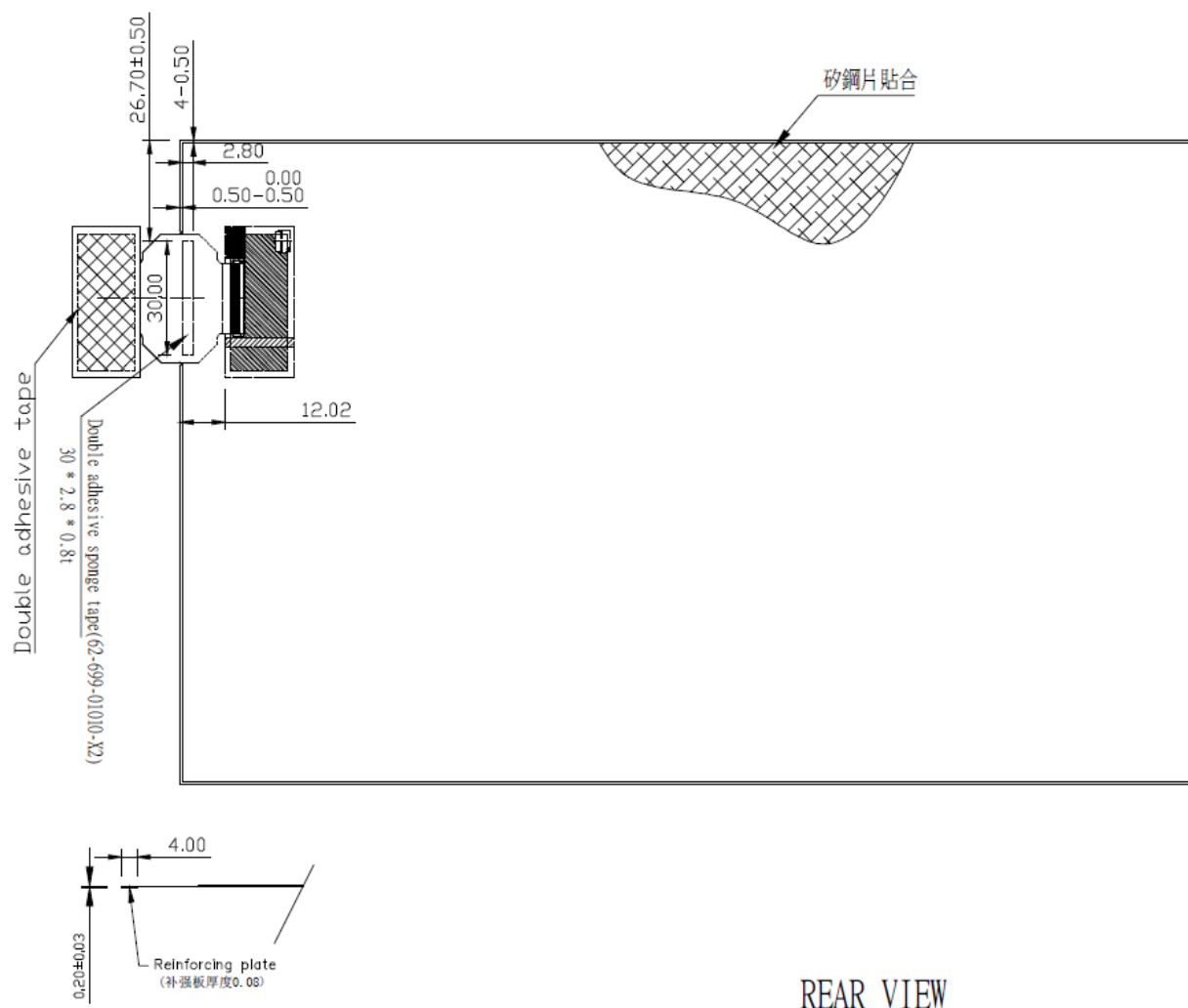
1. Product specifications

1.1 Specifications

Size	12.2"
Sensor Board Size	268.77mm * 170.23mm
Sensor Board Active Area Size	262.77mm * 164.23mm
Control Board Size	18mm * 40mm
Technology	Electromagnetic with Battery Free Pen
Coordinate Resolution	32768 * 32768
Pressure Resolution	1024 Levels
Report Rate	133 PPS
Supply Voltage	3.3V±5%
Coordinate Accuracy	± 1 mm
Coordinate Deviation When Tilting Pen (Pen tilt: ± 50° from Vertical)	± 2 mm (Central Area) ± 5 mm (Boundary and Corner Area)
Stylus	GT-090S
Working Frequency Range of Stylus	500 KHz ~ 511KHz
Maximum Pen Tilt Range	± 50° from Vertical (except for corners)
Operating System	Windows
Driver	HID OVER I ² C
FW Version	V0002
FW Check	9038
This specification is for standard module. For better performance, it needs to be customized with customer's system. Please avoid interfering around pen working frequency range.	

1.2 Product Drawing





Note:

1. All data listed in specification is based on EMRight's measurement method.
2. This measurement is tested with EM module and pen only, no included other components.

1.3 Digitizer board connection and interface pin define.

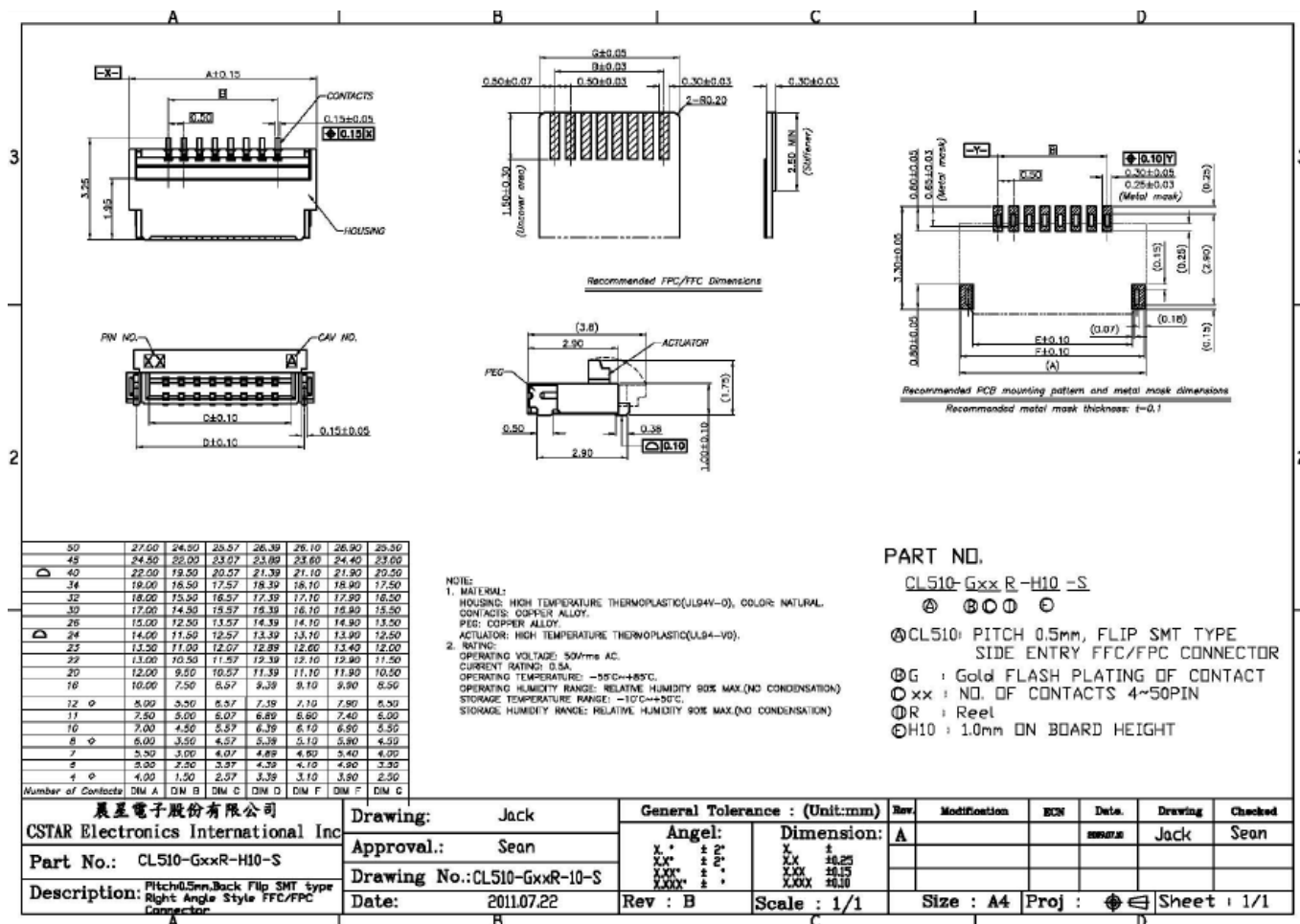
1.3.1 I2C Connector pin define.

Pin	Define	Function	Description
1	NC	No Connection	N.C; reserve for 1.8V input
2	SCL	I ² C Clock Signal	Open drain. Must be pull-up resistor at host (+1.8V)
3	SDA	I ² C Data Signal	Open drain. Must be pull-up resistor at host (+1.8V)
4	INT	Interrupt	This is set to "Low" when I2C slave data ready to send Open drain. Must be pull-up resistor at host (+1.8V)
5	RST	Reset signal	Open drain. RESET PIN (ACTIVE LOW) (+3.3V)
6	Digitizer Detect	Detect Digitizer	This pin is ground for host detect
7	3.3V	Power Supply	power supply voltage(+3.3V)
8	GND	Ground	Ground.

1.3.2 I2C device information

I2C Address	0X0A
Addressing mode	7-bit
Connection speed	400khz
INT mode	falling edge
HID DESCRIPTOR Address	0x0002
Product ID	0xE700
Vendor ID	0x2C68

I2C Interface Connector: CL510-Gxx R- H10-S



1.4 Absolute Maximum Ratings

Item	Symbol	Min	Max	Unit	Checked Terminal
Applied Voltage	V _{CC}	-0.5	4.6	V	V _{CC} -GND
Input/ Output voltage	V _{IO}	GND -0.3	V _{CC} +0.3	V	IO-GND
Operating Surrounding Temperature	T _{OP}	-10	75	°C	
Storage Temperature	T _{STG}	-40	150	°C	

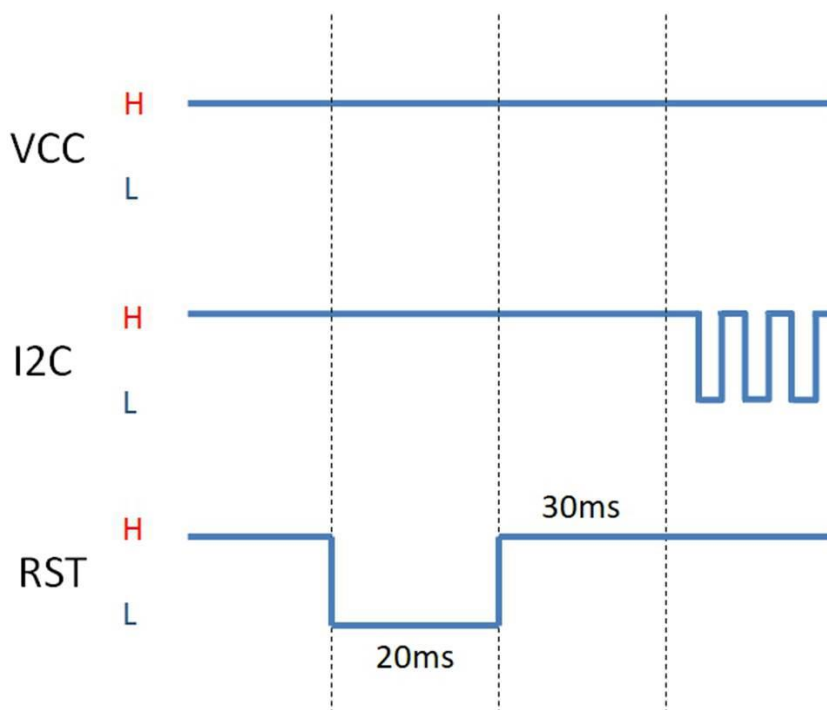
1.5 Electrical Characteristics

Power Consumption

Item	Min.	Typ.	Max.	Unit.	Remark
High scan mode	35	39	43	mA	-
Low scan mode	8	9	10	mA	-

1.6 Power-on-Sequence

Step1	SDA = High SCL = High INT = High RESET = High
Step2	RESET = LOW
Step3	Wait 20 ms
Step4	RESET = High
Step5	Wait 30ms
Step6	Send I2C Stop condition
Step7	Wait 20 ms
Step8	Send Get Firmware Info command (0xAA). Optional
Step9	Initial sequence finished, wait INT to receive normal coordinate report



1.7 Product Function and Appearance Inspection Standard

No	Disadvantages name	Inspection specifications		Notes
1	Poor function	Based on EMRight's measurement method	Not allowed	
2	Inconsistent size	According to the approval sample and drawing.	Not allowed	
3	Cracking	Soft board conductor cracks, the conductor must not break.	Not allowed	
4	Folds	Adhesive irregularities cause surface protrusions: Fold length > 10mm	Not allowed	
5	Layers	Layering between soft board and reinforcing board.	Not allowed	
6	Burr	Cut off surface.	Not allowed	
7	Breakage	Metal sheets aluminum foil	Not allowed	
8	Printing	1. Fonts and graphics should be clearly and identified.	Visual	
		2. Must be in complete word and shape.		
		3. Fonts and graphics should not be distorted or misrepresented.		
		4. Printing missing or smeared characters, delamination are not accepted.		

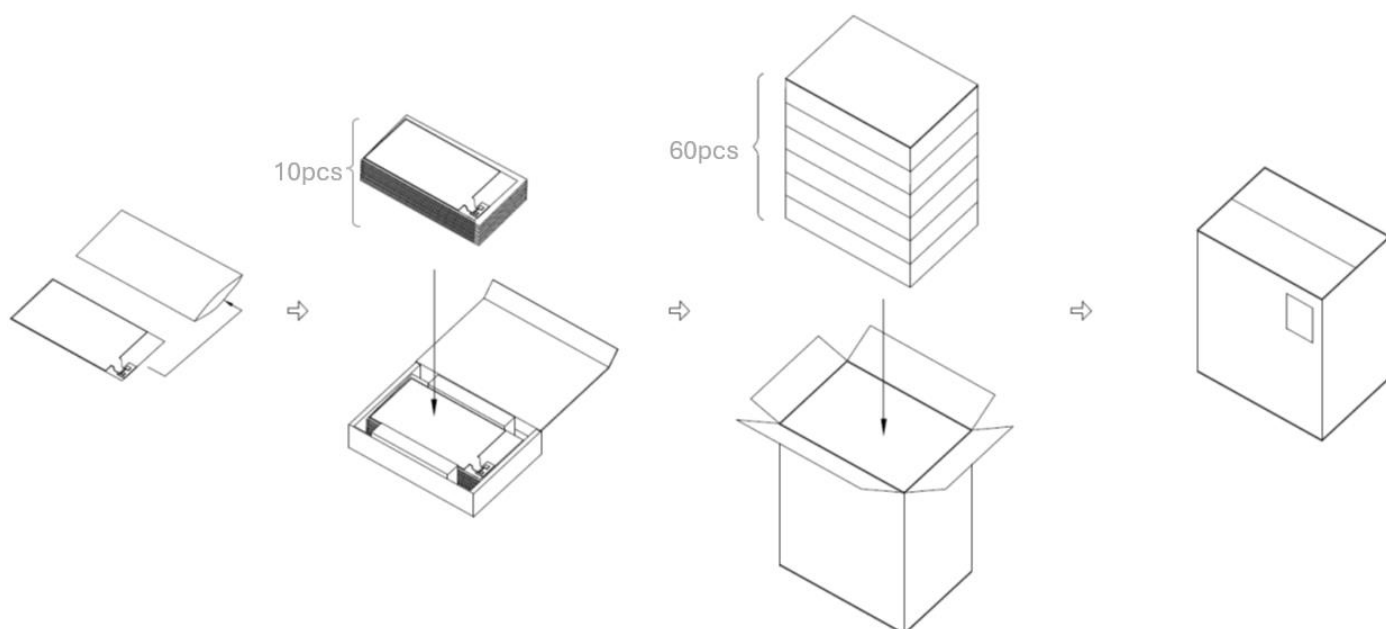
Inspection conditions:

1. Visual observation of 3-5 seconds (Inspector is not colorblind, and bare or vision correction in 1.0 percent).
2. Check for ambient lighting in 500LUX Shang, daylight color fluorescent lamp light prevails.
3. Items to be checked should be placed away from the eyes of about 30 ~ 45 parts per location, around 45-degree angle range, to specified depending on examining or measuring tool-checking it.

2. Product complies with regulations

This product complies with the RoHS directive and halogen-free requirements

3. Packing



Installation Guidance

Digitizer Module

FCC ID: QYLGET122TF12, IC ID: 10301A-GET122TF12

General

This module is only approved for OEM installation. OEM integrator must ensure that there is no instruction provided in the user manual or customer documentation indicating how to install or remove the transmitter.

List of applicable FCC rules

FCC Rule parts 15.209 is applicable to this module. These are the rules that specifically establish the bands of operation, the power, spurious emissions, and operating fundamental frequencies.

Summarize the specific operational use conditions

The modular transmitter does not have its own RF shielding, and was tested inside a specific platform (FCC model: F120, F120Y (Y= 10 characters, Y can be 0-9, a-z, A-Z, -, _ or blank for marketing purpose and no impact safety related critical components and constructions; Brand: Getac) (IC model: F120; Brand: Getac). This module was approved under limited modular approval with restriction in the next section.

Limited module procedures

This module was approved as limited modular approval, and is only valid on the specific host platform (FCC model:F120, F120Y (Y= 10 characters, Y can be 0-9, a-z, A-Z, -, _ or blank for marketing purpose and no impact safety related critical components and constructions; Brand: Getac) (IC model:F120; Brand: Getac). Any new host platform requires re-testing and a separated Class II Permissive Change.

The new host platform must follow the following test plan to verify that the additional hosts other than the specific host originally granted meets the requirement to satisfy the module limiting conditions:

Standard Clause	Test Items	Test Mode
15.207	AC Power Line Conducted Emissions	Retest on the new host platform
15.215	20dB Spectrum Bandwidth	Retest on the new host platform
2.1049	99% OBW Spectrum Bandwidth	Retest on the new host platform
15.209	Field Strength of Fundamental Emissions	Retest on the new host platform
15.209	Radiated Spurious Emissions	Retest on the new host platform
2.1093	RF Exposure	Retest on the new host platform

Trace antenna designs

Not applicable.

RF exposure considerations

This module was tested inside a specific platform (FCC model: F120, F120Y (Y= 10 characters, Y can be 0-9, a-z, A-Z, -, _ or blank for marketing purpose and no impact safety related critical components and constructions. ; Brand: Getac) (IC model: F120; Brand: Getac). Any new host platform requires re-testing and a separate class II permissive change.

Antennas

This module was approved with the following antenna:

Antenna	Antenna Manufacturer	Antenna Model No.	Antenna Type
Digitizer	EMRight	GET-122T	Loop

Label and compliance information

Appropriate labels must be affixed to the product that complies with applicable regulations in all respects. The regulatory label on the final system must include the statement: “Contains FCC ID: QYLGET122TF12 and/or IC: 10301A-GET122TF12”.

OEM integrator must ensure that there is no instruction provided in the user manual or customer documentation indicating how to install or remove the transmitter. OEM integrator must ensure that a user’s manual or instruction manual must be included with the final product that contains the regulatory statements as required by applicable law. Including but not limited to:

USA—Federal Communications Commission (FCC)

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

INFORMATION TO USER:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the distance between the equipment and the receiver.
- Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Canada - Industry Canada (IC)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). L’utilisation de ce dispositif est autorisée seulement aux conditions suivantes: (1) il ne doit pas produire de brouillage et (2) l’ utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

Information on test modes and additional testing requirements

Additional guidance for testing host products is given in KDB Publication 996369 D04 Module Integration Guide. This module was tested in specific host platform, any new host platform or any co-location with other transmitters requires re-testing and a separate class II permissive change.

Additional testing, Part 15 Subpart B disclaimer

The modular transmitter is **only** FCC authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

Note EMI Considerations

Host manufacture is recommended to use D04 Module Integration Guide recommending as "best practice" RF design engineering testing and evaluation in case non-linear interactions generate additional non-compliant limits due to module placement to host components or properties.

For standalone mode, reference the guidance in D04 Module Integration Guide and for simultaneous mode; see D02 Module Q&A Question 12, which permits the host manufacturer to confirm compliance.

How to make changes

Only Grantees are permitted to make permissive changes. Please contact us if the host integrator expects the module to be used differently than as granted:

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