



OEM/Integrators Installation Manual – CC33MOD-DB

Important Notice to OEM integrators

1. This module is limited to OEM installation ONLY.
2. This module is limited to installation in mobile or fixed applications, according to Part 2.1091(b).
3. The OEM should refer to the [CC335xMOD Datasheet](#) for trace design instruction. As a module using trace design, this module relies on the host product manufacturers to prepare the antenna connector. A unique antenna connector must be used on the Part 15 authorized transmitters used in the host product. The module manufacturer shall provide a list of acceptable unique connectors below.
4. The separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and different antenna configurations
5. For FCC Part 15.31 (h) and (k): The host manufacturer is responsible for additional testing to verify compliance as a composite system. When testing the host device for compliance with Part 15 Subpart B, the host manufacturer is required to show compliance with Part 15 Subpart B while the transmitter module(s) are installed and operating. The modules should be transmitting and the evaluation should confirm that the module's intentional emissions are compliant (i.e. fundamental and out of band emissions). The host manufacturer must verify that there are no additional unintentional emissions other than what is permitted in Part 15 Subpart B or emissions are complaint with the transmitter(s) rule(s).

CE Certification and Statement

The CC33MOD-DB module is tested for and found to be in compliance with CE regulations regarding unlicensed intentional radiators. Hereby, Texas Instruments Incorporated declares that the radio equipment type CC33MOD-DB is in compliance with Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available on ti.com.

RF Exposure Information (MPE)

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. to comply with the RF exposure requirements, this module must be installed in a host platform that is intended to be operated in a minimum of 20-cm separation distance to the user.

Indoor Usage Restrictions

This device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	IS
	LI	NO	CH	TR	UK(NI)		

Restriction or Requirement in the UK: 5150 to 5350 MHz indoor-use only

Waste Electrical and Electronic Equipment (WEEE)

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	This symbol means that according to local laws and regulations your product and/or battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.

Antenna Installation

- (1) The antenna must be installed such that 20 cm is maintained between the antenna and users,
- (2) The transmitter module may not be co-located with any other transmitter or antenna.
- (3) Only antennas of the same type and with equal or less gains as shown below may be used with this module. Other types of antennas and/or higher gain antennas may require additional authorization for operation.

Brand	Part Number	Antenna Type	Peak Gain (dBi)
Kyocera AVX	M830520	Chip antenna	2.4Ghz: 2.6 dBi 5GHz: 4 dBi
Kyocera AVX	W4P42X8W04-U100D3B0A	External PCB antenna	2.4Ghz: +1.7 dBi 5GHz: +3.4 dBi
TDK	ANT162442DT-2001A2	Chip antenna	2.4Ghz: +2.13 dBi 5GHz: +2.3 dBi
Yageo	ANT3216A063R2455A	Chip antenna	2.4Ghz: +1.59 dBi 5GHz: +2.23 dBi
Yageo	W5028T	Dipole (stick) antenna	2.4Ghz: +2.0 dBi 5GHz: +3.2 dBi
Yageo	W3078T	Monopole (ceramic) antenna	2.4Ghz: +0.1 dBi 5GHz: +3.5 dBi
Yageo	W3917B0100T	Dipole (flexible PC) antenna	2.4Ghz: +3.0 dBi 5GHz: +4.0 dBi
Molex	204281-1100	External PCB antenna	2.4Ghz: +2.0 dBi 5GHz: +3.3 dBi
Molex	146153-1100	External PCB antenna	2.4Ghz: +3.0 dBi 5GHz: +4.0 dBi
Molex	204281-0100	External PCB antenna	2.4Ghz: +2.0 dBi 5GHz: +3.3 dBi
Molex	146153-0100	FPC	2.4Ghz: +3.0 dBi 5GHz: +4.0 dBi
Unictron	H2B1PD1A1C385L	External PCB antenna	2.4Ghz: +2.7 dBi 5GHz: +3.5 dBi
Unictron	H2B1PC1A1C095L	External PCB antenna	2.4Ghz: +0.9 dBi 5GHz: +3.8 dBi
Laird	WTS2450	Whip antenna	2.4Ghz: +2.1 dBi 5GHz: +3.4 dBi
TE Connectivity	001-0012	Whip antenna	2.4Ghz: +3.0 dBi 5GHz: +3.0 dBi
Chang Hong	DA-2458-02	Whip antenna	2.4Ghz: +2.0 dBi 5GHz: +3.0 dBi
Ezurio	001-0016	Flex PIFA	2.4Ghz: +2.5 dBi 5GHz: +3.0 dBi

Table 1 – Antenna Specifications

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC/IC authorization is no longer considered valid and the FCC ID/IC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC/IC authorization.

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as show in this manual.

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules:

FCC	RF	FCC CFR 47 Part 15 Subpart C & E (latest revision)
		Part 15 Subpart C 15.247 (latest revision)
		Part 15 subpart E 15.407 (latest revision)
	EMC	FCC CFR 47 Part 15 Subpart C & E (UNII) (latest revision)
		Part 15 Subpart C 15.247 (latest revision)
		Part 15 subpart E 15.407 (latest revision)
		47 CFR FCC Part 15, Subpart B, Class B (latest revision)
	EMF	FCC CFR 47 Part 1.1310 (latest revision)

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the 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 and, if not installed and used in accordance with the instructions, 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 turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3(B)/ NMB-3(B)

Radiation Exposure Statement

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20** cm between the radiator & your body.

EMI Considerations

The OEM should refer to KDB 996369 D04 and D02 for guidance of host device compliance.

Information to Make Changes

Only Grantees are permitted to make permissive changes. Please contact TI if the host integrator expects the module to be used differently than as granted: connectivity-wifi-cert@list.ti.com

End Product Labeling

In order to comply with the CC33MOD-DB modular approval for use in Canada and the United States. OEM/Host manufacturers must include the following example label as shown in Figure 5 on their end-product and user manual.

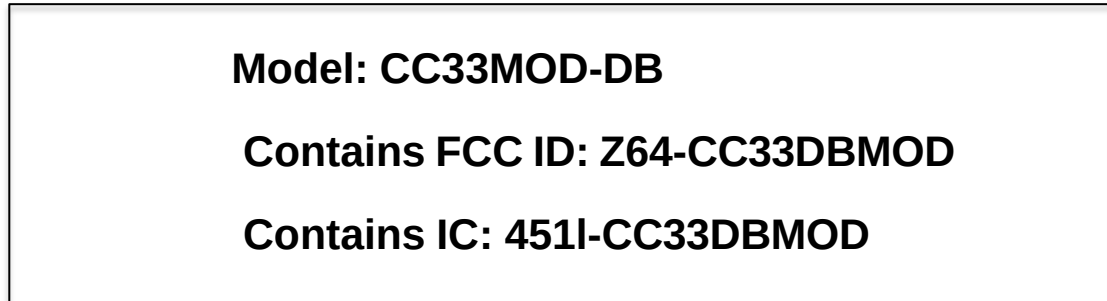


Figure 1 – Example label for end product to reuse the modular approval