

RF Module, 2400-2483.5 MHz

A-1028250



BEFORE YOU BEGIN

Read these instructions completely and carefully.

FCC / ISED COMPLIANCE STATEMENTS

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.

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-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.

To satisfy FCC/ISED RF exposure requirements a separation distance of 20 cm or more must be maintained between the antenna of this device and persons during operation. Operation at closer than 20 cm is not permitted.

Pour être conforme aux limites d'exposition aux ondes RF des normes FCC/ISED, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil et toute personne pendant son opération. Mettre en opération cet appareil à une distance plus rapprochée que 20 cm n'est pas permis.

RF Module Integration Instructions

This module is not for sale and is only to be used within host products designed by Current Lighting Solutions, LLC (the manufacturer of the module).

Applicable FCC Rules

- CFR47 FCC Part 15, Subpart C, 15.207
- CFR47 FCC Part 15, Subpart C, 15.209
- CFR47 FCC Part 15, Subpart C, 15.212
- CFR47 FCC Part 15, Subpart C, 15.247
- CFR 47 FCC Part 2, 2.1091

Operational Use Conditions

The input voltage to the module should be nominally 3.3VDC and the ambient temperature of the module should not exceed 85C.

No trace antennas are used in this module. If the RF module's on-board chip antenna is not used in the host product, then the host product's antenna should only be installed when the host product is manufactured. (The antenna is not field replaceable.) The antenna must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multi-transmitter evaluation procedures.

RF Exposure

This module has been granted modular approval for fixed facility and mobile applications that maintain a distance of 20 cm from a person's body.

To comply with FCC / IC regulations limiting both maximum RF output power and human exposure to RF radiation, the maximum antenna gain including cable loss in a mobile-only or fixed application exposure condition must not exceed 2.5 dBi.

Qualified Antennas

The radio transmitter with FCC ID: 2AS3F-A1028250 and IC: 25008-A1028250 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

This module has been tested and certified with the on-board chip antenna and with an external antenna connected to the RF pad (P30). External antennas permitted to be used with this module must meet the following requirements:

- The antenna must be one of the following types: chip antenna, connectorized coaxial PCB or connectorized coaxial patch antenna
- The antenna must have a maximum gain of: 2.5 dBi
- The antenna impedance must be 50Ω.
- The antenna must use a unique antenna connection such as a miniaturized coaxial connector (such as a U.FL or IPEX connector) or a component footprint within a printed circuit board layout.

RF Module Integration Instructions (Cont'd)

Additional Testing

The final host / module combination needs to be evaluated against the FCC Part 15 Subpart B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.

The host integrator installing this module into their product must ensure that the final composite product complies with the FCC requirements by a technical assessment or evaluation to the FCC rules, including the transmitter operation and should refer to guidance in KDB 996369.

Additional Information

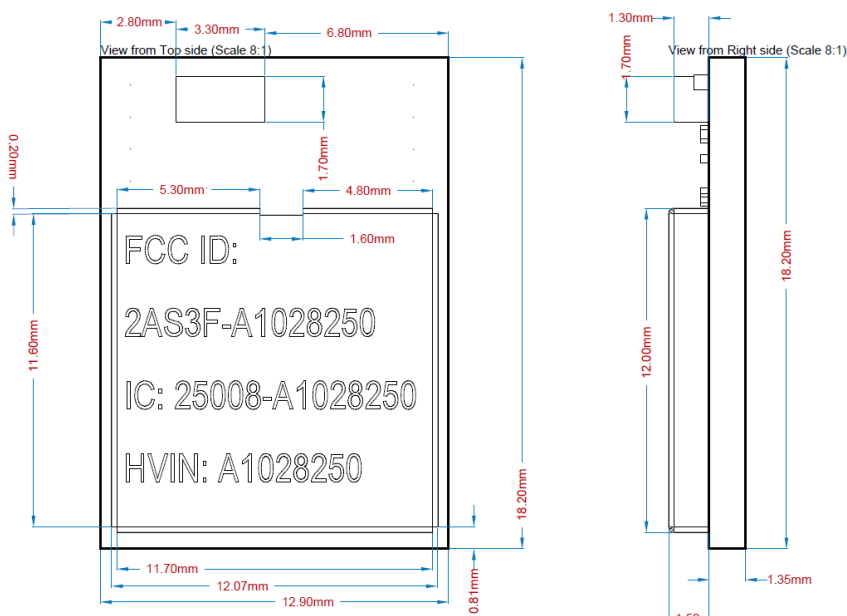
This module may be used in host products without additional FCC / IC (Industry Canada) certification if the host products meet the following conditions. Otherwise, additional FCC / IC approvals must be obtained.

- The host product with the module installed must be evaluated for simultaneous transmission requirements.
- The users manual for the host product must clearly indicate the operating requirements and conditions that must be observed to ensure compliance with current FCC / IC RF exposure guidelines.
- A label must be affixed to the outside of the host product with the following statements:

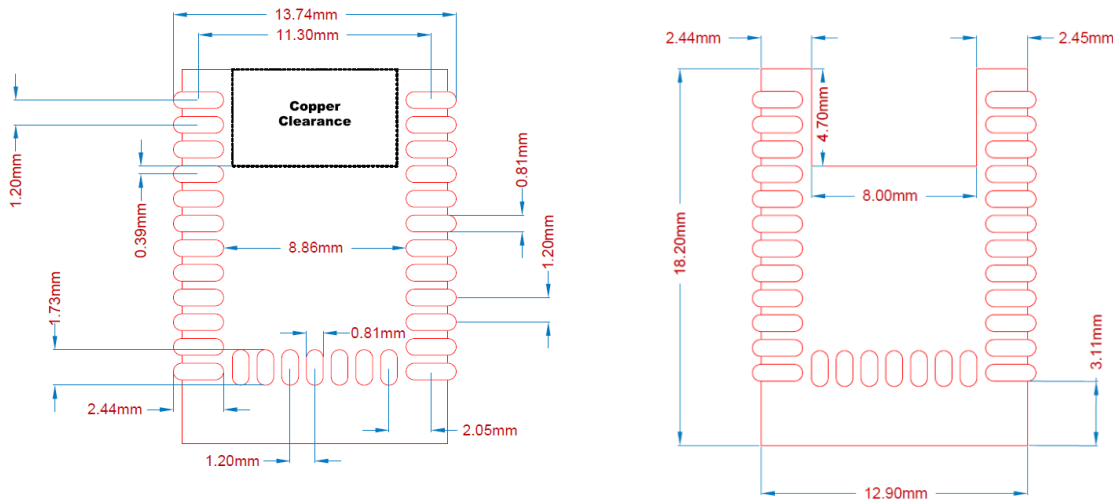
This device contains FCCID: 2AS3F-A1028250

This equipment contains equipment certified under ICID: 25008-A1028250

RF Module (A-1028250) External Dimensions



Recommended Host PCB Land Pattern



Regulatory Information

FCC ID: 2AS3F-A1028250

IC: 25008-A1028250

HVIN: A1028250

FVIN: RF SDK 6.5.3.0 and above

Supplier Information

Name: Current Lighting Solutions, LLC

Address: 1975 Noble Road, East Cleveland, OH 44112 (USA)

Website: www.gecurrent.com

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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 or more 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