

Introduction to MIIT Notice 2014-01: China SRRC Modular Approval

March 2014

Snell Leong
Certification Department

SIEMIC Certification Services
SIEMIC Inc, Global Certification Division.

Disclaimer

This presentation is our interpretation based on our best knowledge of the China MIIT Notice 2014-1. However, interpretations from different parties may vary.

What is MIIT Notice 2014-01

- In order to meet the new radio technology application characteristics and development trends, in January 2014 China MIIT published a notice of a new SRRC certification scheme
- This new scheme regulates the non-independently operated radio transmitting modules that can be embedded into non-radio transmitting equipment
 - (e.g. IT equipment, household appliances, etc.).

What is Qualified Host System?

This notice specifies that a qualified host system must be able to work independently, without the radio module.

The embedded radio should be operated as a peripheral or an additional functional unit only.

- Good example of a qualified host system-
Printer, Computer, AV devices, Household appliances.
- Good Example of a non-qualified Host system-
A wireless plugin card, which does not have the ability to function independently without the embedded radio.

What is Non-Independently Transmitting Radio Module?

A non-independent radio module should have transmitting radio wave capability, but can not be operated independently.

It should only be intended to operate after it is embedded into a host system.

2 Types of SRRC Modular Approval.

- **Radio with Full Modular Approval (FMA)**
Meets first 4 conditions proposed by the official announcement
(see Annex 1 of Notice)
- **Radio with Limited Modular Approval (LMA)**
Meets any 3 of the first 4 conditions proposed by the official announcement
(see Annex 1 of Notice)

Also Note: In Annex 1 lists a total of 5 conditions; the 5th condition is always required to comply for both type of modular schemes.

Full Modular Approval (FMA) Criteria

A non-independently transmitting radio module which meets all conditions in Annex 1 as listed in below:

1. the module should have its own data buffer and modulating unit.
2. The radio module's transmitting unit should have RF shielding.
(it does not require shielding of entire module.)
3. The module should use unify antenna.
(A unify antenna is defined as an integral antenna.)
4. The module should have clear indication of input voltage.
5. The module should meet all others SRRC's rule and regulations.
*5th conditions is mandatory regardless of FMA/LMA

Limited Modular Approval (LMA) Criteria

A non-independent radio module which meets any 3 of first 4 conditions in Annex 1 as listed in below:

1. The module should have its own data buffer and modulating unit.
2. The radio module's transmitting unit should have RF shielding.
(it does not require shielding of entire module.)
3. The module should use unify antenna.
(A unify antenna is defined as an integral antenna.)
4. The module should have clear indication of input voltage.
5. The module should meet all others SRRC's rule and regulations.
*5th conditions is mandatory regardless of FMA/LMA

FMA / LMA Application Required Documents

All required documents are the same as traditional SRRC approval, with the additional requirement for the user manual as listed below:

The manual should have :

FMA – (1) detailed information about the installation and configuration conditions when embedded into host system.

LMA --(1) detailed information about the installation and configuration conditions when embedded into host system (same as FMA), plus
(2) declaration statement "*when LMA radio embedded into Host system , it does not mean the host system complied with SRRC rule and regulation. The manufacturer of host system has the responsibility to make sure the combined system comply with SRRC rule and regulation*".

CMIIT ID & Labeling for FMA/LMA

- FMA – “ CMIIT ID XXXYYZZZZ ”
- LMA – “ CMIIT ID XXXYYZZZZ (M) ”

CMIIT stands for **China Ministry of Industry and Information Technology**

XXXX : issued year of certificate

YY: Equipment Category, (e.g. DJ – Short range device)

ZZZZ: Approval serial number issued by SRRC

The above (highlighted in green) should be affixed on the radio module.

Notes for System Using Approved FMA

When Host system is using an approved FMA radio:

- (1) The Host system does not require a new SRRC certificate for the combined system.
- (2) The host should bear a label containing the statement "This device contains SRRC approved Radio module CMIIT ID XXXXYYZZZZ".
- (3) The Radio module certificate holder remains the responsible party to ensure the combined system continues complying with SRRC results and regulation.

Notes for System Using Approved LMA

When Host system is using an approved LMA radio:

- (1) The Host system requires a new SRRC certificate.
 - (a) a new CMIIT ID will be issued to the host system.
 - (b) need to perform radiated related testing only.
- (1) The Host system's new SRRC certificate will contain the LMA's CMIIT ID information.
- (2) The Host system should be affixed with the new MIIT ID (NOT the LMA's CMIIT ID) following the traditional SRRC labeling requirements.
- (3) It is allowed to list multiple models numbers on a single Host system certificate.

Notes for system using mixed LMA/FMA

When Host system uses a mix of approved FMA/LMA radios.

1. The Host system will **require** new SRRC certificate.
 - (a) a new CMIIT ID will be issued to the combined system.
 - (b) need to perform radiated related testing only for **LMA radio**.
2. The Host System's SRRC certificate will contain LMA's CMIIT ID information.

Notes for system using mixed LMA/FMA (cont.)

3. The Host System should be affixed with the new MIIT ID (NOT the LMA's CMIIT ID) following traditional SRRC labeling requirements.
4. The Host system should also be affixed with this label statement:
" This device contains SRRC approved Radio module CMIIT ID
XXXXYYZZZZ" for FMA used in the system.
5. It is allowed to list multiple models numbers on a single Host system certificate.

Modification to Approved Host system with LMA Radio

Conditions that requires updating SRRC filing for existing Host system's SRRC Certificate using LMA radios:

It must meet 1 of the following 2 conditions:

- (1) Adding more LMA radio into host system or
- (2) Replacing existing LMA radio with new LMA radio.

The updating filing will simply update the LMA info on the SRRC certificate, hence no new CMIIT ID will be issued, so the modified host system should continue carrying the same original CMIIT ID.

PS: if simply removing or reducing existing LMA , it does not require an updated filing to the existing SRRC host system certification.

Required Documents for Initial Filing to Host System using LMA Radio

All the required documents for a traditional SRRC approval must be included, with the following additional documents:

- (1) Copies of all embedded LMA SRRC Certificates.
- (2) A documents detailing how the LMA radios was integrated and embedded into the host system.

Required Documents for Updating Filing to Host System using LMA Radio

All the required documents for a traditional SRRC approval must be included, with the following additional documents:

- (1) Copy of Original Host system's SRRC Certificate.
- (2) Copies of all existing embedded LMA SRRC Certificates.
- (3) Copies of all new embedded LMA SRRC Certificates.
- (4) A documents detailing how the LMA radios was integrated and embedded into host system.

FAQ – Example 1

Can FMA/LMA be approved with multiple antennas?

FMA- No , because of the requirement for an integral antenna



LMA - Yes, but it does not provide any additional advantage, because



the host system using the LMA module will always need to perform radiated related testing, regardless of if the antenna used is already approved with LMA certification.

FAQ-Example 2

If a product was already SRRC certified via the tradition scheme, can a manufacturer add a FMA/LMA radio into the system?

FMA- Yes ,



LMA – No , since a system using LMA will require additional SRRC approval. A system is not allowed to be certified under both traditional and new schemes.



FAQ-Example 3

Is it allowed to do multiple listings, based on approved radio module, such as applying new model for same radio?



Ans : No

FAQ-Example 4

Is it allowed to use different antennas when FMA/LMA is embedded into the host?

FMA: it should not be possible to have new antenna unless the radio was modified.



(recall that an integral antenna is a FMA requirement)

Hence, it is not allowed

LMA: Yes , it is allowed .



In fact , it make no different in term of testing if the antenna used is new or certified with LMA. Because radiated related testing is always required.

FAQ-Example 5

Is it allowed to update a radio module's certificate from LMA to FMA?

For example, if a LMA was modified to have an integral antenna, and then the company wanted to change from LMA to FMA.



No, it is not possible, because the CMIIT ID of FMA and LMA are different formats.

For the above example, it will need to apply for a new FMA certificate.

FAQ-Example 6

If a system (with LMA) was approved under the new scheme, is it required to make an Updated Filing when changes are made to the non-radio portion?



Per the current notice, the only 2 changes that will required an Updated Filing are when the LMA is replaced, or a new LMA is added.

Therefore, it should not require an Updated Filing when only the non-radio portion is modified.

China SRRC Modular Approval



Thank you