LT1110 Preliminary Manual

LT1110 Regulatory Information

1.1 Agency Identification Numbers

Family	US/FCC	CANADA/IC
LT1110-10	KQL-111010	2268C-111010

LT1110-10 Family

Part #	Description	Packaging
PRM210	(+8 dBm), SMD with U.FL connector	SMD-U.FL
PRM211	(+8 dBm), SMD with -1dBi integrated antenna	SMD-ANT
PRM220	(+8 dBm), Pluggable with U.FL connector	PLG-U.FL
PRM221	(+8 dBm), Pluggable with -1dBi integrated antenna	PLG-ANT

1.2 Approved Antenna List

LT1110-10 family has been designed to operate with the antennas listed below and having a maximum gain of 15dbi. The required antenna impedance is 50 ohms.

Item	Part Number	Mfg.	Type	Gain (dBi)
1	0915AT43A0026	Johanson	Chip	-1
2	PC9013N	Laird Technologies	Yagi	15
3	SG104N-915	Nearson	Omni	9
4	S467FL-6-PX-915S	Nearson	Dipole	2

- The OEM is free to choose another vendor's antenna of like type and equal or lesser gain as an antenna appearing in the table and still maintain compliance.

1.3 FCC/ IC Requirements for Modular Approval

In general, there are two agency classifications of wireless applications; portable and mobile.

Portable – Portable is a classification of equipment where the user, in general, will be within 20 cm of the transmitting antenna. Portable equipment is further broken down into two classes; within 2.5 cm of human contact and beyond 2.5 cm. The LT1110-10 family is not agency approved for portable applications. The OEM is required to have additional testing/ evaluation performed to receive this classification. Contact Laird Technology for more details.

Mobile – Mobile defines equipment where the user will be 20 cm or greater from the transmitting equipment. The antenna must be mounted in such a way that it cannot be moved closer to the user with respect to the equipment, although the equipment may be moved.

This equipment has been approved for mobile applications where the equipment should be used at distances greater than 20 cm from the human body.

1.4 Caution

Any changes or modifications not expressly approved by Laird Technology could void the user's authority to operate the equipment.

1.5 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 not 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:

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

1.6 OEM Equipment Labeling Requirements

WARNING: The OEM must ensure that FCC labeling requirements are met. This includes a clearly visible label on the outside of the OEM enclosure specifying the appropriate Laird Technology FCC identifier for this product as well as the FCC notice below. The FCC identifiers are listed above.

Contains FCC ID:KQL-111010 This enclosed 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

Label and text information should be in a size of type large enough to be readily legible, consistent with the dimensions of the equipment and the label. However, the type size for the text is not required to be larger than eight point.

1.7 Antenna Requirements

To reduce potential radio interference to other users, the antenna type and gain should be chosen so that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

1.8 Warnings Required In OEM Manuals

WARNING: This equipment has been approved for mobile applications where the equipment should be used at distances greater than 20cm from the human body. Operation at distances of less than 20cm is prohibited and requires additional SAR evaluation .