

Viasat, Inc.	Process Area: Quality	Document Number: PR000450	Revision: 004
Name of Document: WEEE Marking Guidelines		Process Category: Environmental Compliance	Page: 1 of 4

1 Purpose and Scope

Provide Marking Guidelines for the WEEE (Waste of Electrical and Electronic Equipment) Marking of Electrical and Electronic Assemblies designed by Viasat, Inc.

2 Application

This applies to Viasat, Inc. products that do not fall under the military, government or fixed site exemption as determined by the guidelines set forth in, Directive 2012/19/EU OF THE EUROPEAN PARLIAMENT (WEEE).

Product which has been determined to fall within the requirements of the WEEE directive shall have, within the product's Bill-of-Material and/or Purchase/Design specification, the documented WEEE labeling requirement. This may be specified by Viasat label part number, reference drawing or reference to this specification for marking by a provider

Program Management or Design Engineering should contact the Compliance Manager if there is any question on product marking for WEEE compliance.

3 Marking Requirements

CENELEC EN 50419:2006 describes the official marking of electrical and electronic equipment, this standard applies to selected electrical and electronic equipment.

In order to identify a) the producer and b) the equipment put on the market after 13 August 2005, the following markings shall be applied on the product:

- A. A unique identification of the producer (Viasat, Inc. brand name, trademark, company registration number or other suitable means to identify the Viasat, Inc. product).
 1. Put on the market after August 13 2005 shall be identified by either:

The date of the manufacture/put on the market with the crossed-out wheeled bin. The date shall be compliance with EN28601 requirement using the YYYY Gregorian calendar, MM, Use leading zero's for single digit months and days (ex. 06 = June, 11= November, DD = 01 to 31), "YYYY-MM-DD" format or other format approved by Viasat, Inc. Engineering. [EXAMPLE: August 13, 2005 must be written as 2005-08-13]
 2. A solid bar under the wheeled bin together with the crossed-out wheeled bin.
 3. Both options (1&2) above can be used at the same time.
 - B. Marking is not required for the following EE products:
 - a. Equipment sent in space
 - b. Large-scale stationary industrial tools
 - c. Large-scale fixed installations, except any equipment which is not specifically designed and installed as part of those installations;
 - d. Means of transport for persons or goods, excluding electric two-wheeled vehicles which are not type-approved;
 - e. Non-road mobile machinery made available exclusively for professional use;
 - f. Equipment specifically designed solely for the purpose of research and development that is only made available on a business-to-business basis;
 - g. Medical devices and in vitro diagnostic medical devices where such devices are expected to be infective prior to end of life, and active implantable medical devices.
-

Name of Document: WEEE Marking Guidelines	Document Number: PR000450	Revision 004	Page: 2 of 4
---	-------------------------------------	------------------------	------------------------

4 Marking Design

- 4.1 Label Stock and Ribbon and Print shall be RoHS Complaint to European Union Directive 2011/65/EU
- 4.2 The marking shall be accessible, durable, legible and indelible
- 4.3 The solid bar used in conjunction with the Cross-out Wheeled Bin shall not contain any text or information of any kind. The dimensional relationships are defined in EN 50419:2006 Section 4.2 and Figure 1 shall be maintained. (EX. Figure 1)
 - a. The black bar denotes that the product has been placed on the market after 2005 when the directive came into force.
 - b. Goods without the black bar were manufactured between 2002 and 2005, these products are treated as "historic WEEE".



Figure 1

- c. Under neither the black bar, there is an option to put Viasat website location for product takeback information/disposal.
- 4.4 Modification of line thicknesses, rounding corners and matching lines are permitted provided the visual appearance is maintained
- 4.5 If marking standards or label specifications do not include marking durability requirements the following shall apply:
 - a. The durability requirements must pass the following checks and shall be legible, show no signs of curling and shall not easily remove marking.
 - i. Apply label to material product or similar material, soak a piece of cloth and rub by hand for 15 seconds, ensure no degradation to label or print. Dry label
 - ii. Next use appropriate health and safety protection and measures, Soak a cloth with petroleum spirits (see Note 1), rub sample by hand for 15 seconds.

Note 1- petroleum spirit used for the test is aliphatic solvent hexane having a maximum aromatics content of 0.1% by volume, a kauri-butanol value of 29, an initial boiling point of approximately 65 degrees C, a dry point of approximately 69 degrees C and a specific mass of approximately 0.7 kg/liter.

Name of Document: WEEE Marking Guidelines	Document Number: PR000450	Revision 004	Page: 3 of 4
---	-------------------------------------	------------------------	------------------------

5 Marking Location

- 5.1 Target Location- The marking shall be applied in an obvious location external to the equipment that shall be readily visible on the final assembly for disposal. Apply the marking near or within the vicinity of the Viasat, Inc. part number, serial number or CE Mark are target locations. Other locations are acceptable with Design Engineering and Compliance Management approval.
- 5.2 If the size or other characteristics such as functionality of product determines that the marking can not be applied to the product, the marking shall be:
 - a. A flag with the marking applied to fixed power cord (if any), and
 - b. In the operating instructions and warranty certificates supplied with the product
 - c. If none of the above applies the marking shall be applied to the packaging.
 - d. The optional marking must comply with the marking ratio requirements and where applicable the Design Requirements stated above.
- 5.3 The WEEE marking identification can be incorporated into the part number label, CE label or other product labels provided the dimensional relationships in Figure 1 are maintained. It is advantageous to reduce the number of individual labels on the product by consolidating markings into the same label where applicable.
- 5.4 A stand alone WEEE label is also acceptable such as Viasat, Inc. Part Number 1038396. Other sizes of labels maybe approved for use as deemed necessary.

6 References

Documents

- EN50419:2006, CENELEC WEEE Marking Standard, MARKING OF ELECTRICAL AND ELECTRONIC EQUIPMENT IN ACCORDANCE WITH ARTICLE 11(2) OF DIRECTIVE 2012/19/EU(WEEE)
- EN28601:1992 SPECIFICATION FOR REPRESENTATION OF DATES AND TIMES IN INFORMATION INTERCHANGE
- DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as of 4 July 2012 on waste electrical and electronic equipment (WEEE)Directive 2011/65/EU OF THE EUROPEAN PARLIAMENT, OF 8 June 2011 RESTRICTION ON THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT

Definitions

- WEEE - Waste Electrical and Electronic Equipment means electrical or electronic equipment which is waste within the meaning of Article 3(1) of Directive 2008/98/EC including all components, subassemblies or consumables which are part of the product at the time of discarding.
 - EEE - Electrical and Electronic Equipment means Equipment which is dependent on electric currents or electromagnetic field in order to work properly and equipment for generation, transfer and measurements of such currents and fields falling under the categories set out in Article 3 Definitions of 2012/19/EU and designed for used with a voltage rating not exceeding 1,000 volts for an alternating current and 1,500 volts for direct current
 - 'placing on the market' means the first making available of a product on the market within the territory of a Member State on a professional basis;
 - 'making available on the market' means any supply of a product for distribution, consumption or use on the market of a Member State in the course of a commercial activity, whether in return for payment or free of charge;
 - Producer-any natural or legal person who regardless of selling technique used, including distance communication within the meaning of Directive 97/7/EC of the European Parliament
-

Name of Document: WEEE Marking Guidelines	Document Number: PR000450	Revision 004	Page: 4 of 4
---	-------------------------------------	------------------------	------------------------

and of the council of 20 May 1997 on the protection of consumers in respect of distance contracts;

- is established in a Member State and manufactures EEE under his own name or trademark, or has EEE designed or manufactured and markets it under his/her name or trademark within the territory of that Member State;
- is established in a Member State and resells within the territory of that Member State, under his/her own name or trademark, equipment produced by other suppliers, a reseller not being regarded as the 'producer' if the brand of the producer appears on the equipment, as provided for in point (i);
- is established in a Member State and places on the market of that Member State, on a professional basis, EEE from a third country or from another Member State; or
- sells EEE by means of distance communication directly to private households or to users other than private households in a Member State, and is established in another Member State or in a third country.
- Imports or exports electrical or electronic equipment on a professional basis into a Member State

Whoever exclusively provides financing under or pursuant to any finance agreement shall not be deemed to be a 'producer' unless he/she also acts as a producer within the meaning of points (i) to (iv);

- 'WEEE from private households' means WEEE which comes from private households and WEEE which comes from commercial, industrial, institutional and other sources which, because of its nature and quantity, is similar to that from private households. Waste from EEE likely to be used by both private households and users other than private households shall in any event be considered to be WEEE from private households;

Note: Reference Directive 2012/19/EU for more detailed definitions
