MultiPoint
A Rhein Tech EMC Regulatory Update

October 2008

EMC Regulatory Update

Dear Colleague,
We have provided typical questions and answers that represent in most cases technical opinions with justification in FCC and CE requirements. The particulars of the product for certification must be considered with respect to the applicability of these questions and answers. We hope you find our update valuable and welcome your feedback if you have any special needs or questions. Call at 703-689-0368 or view archived issues of MultiPoint at our web site.

Vietnam MRA Status

QUESTION: What is the current status of APEC TEL Mutual Recognition Agreement (MRA) Phase I with Vietnam?

ANSWER: Vietnam became the seventh APEC economy to implement Phase I of the Asia Pacific Economic Cooperation (APEC) Mutual Recognition Arrangement for Conformity Assessment of Telecommunications Equipment (Telecom MRA) with the United State on June 19, 2008, joining Australia, Canada, Chinese Taipei, Hong Kong, Korea and Singapore. The specific technical regulations/requirements for which Vietnam will be accepting test reports from recognized U.S. testing laboratories are listed in Annex I of the attached Exchange Letter signed by the Vietnamese Ministry of Information and Communications (MIC) and the United States Trade Representative (USTR). NIST, as the U.S. Designating Authority, is currently working with MIC of Vietnam to clarify the final implementation details. It is expected that NIST APEC TEL MRA web site will be updated with any additional general and/or specific requirements. NIST expects to begin accepting applications for Phase I designation to Vietnam by the end of 2008. For further information, Ramona Saar, is NIST Program Manager (ramona.saar@nist.gov).

Form 740 and Importation

QUESTION: Our firm would like to import several radio frequency devices, as samples, into the United States. These devices are not yet tested and approved for FCC compliance. We intend upon having them tested at our compliance lab here in the United States. Are we allowed to import them?

ANSWER: Yes. For importation purposes, FCC Form 740 must be completed either electronically or by attaching it to the Customs entry papers. In the case of your device, Form 740 must be completed and you would claim on the form that your RF device is excluded from the import conditions (Section 2.1202) because "The described equipment is being imported in limited quantities for testing and evaluation for compliance with technical requirements or marketing suitability. The equipment will not be offered for sale or otherwise marketed." Form 740

FCC Rules for Notebook Computers and Subassemblies

QUESTION: We manufacture motherboards, power supplies, and enclosures for notebook computers. How can these components that form the final computer be separately authorized with a Declaration of Conformity or a Grant of Certification, under Section 15.101(c)(3), and sold as separate components under Section 15.102 procedures? Since Section 15.32 does not address notebook computers, what are the test procedures for these devices?

ANSWER: Please review the guidelines at this link: 657217 D01 Notebook CPU Brds and Pwr Suply v01r01, under "Test procedures for Notebook Computers Based on Assembly Using Separately Authorized Motherboard, Enclosures, Power Supplies and Other Devices."

Approvals for computer system components, in accordance with Section 15.101(c)(2) or (c)(3), when the resulting product is not separately tested, require the individual components be tested according with Section 15.31 or 15.32. The attached guidelines provide additional clarification of test procedures specifically for notebook motherboards, power supplies, and enclosures.
A notebook computer enclosure, unlike a desktop computer enclosure, contains active circuitry typically integrated with a video display unit, keyboard, touchpad and other possible components that must be separately treated as a peripheral device and authorized as such. Separately authorizing all the individual devices, including the notebook computer enclosure, under the Declaration of Conformity or Certification procedure, allows a party to market and sell a complete notebook computer, assembled without further testing, under the provisions of Section 15.202.

Manufacturers or responsible parties marketing separately authorized parts must document, for the party marketing an assembled notebook computer, the complete installation procedures that must be followed to ensure compliance. The marketing individual, or the seller, of an assembled notebook computer must ensure:

1. Each device used in the system, including the notebook enclosure combination, has been authorized under the Declaration of Conformity or Certification procedure;
2. The original label and identification on each piece of equipment remain unchanged;
3. Each responsible party's instructions to ensure compliance (including, if necessary, the use of shielded cables or other accessories or modifications) are followed when the system is assembled;
4. The final notebook computer is authorized under:

    - A Declaration of Conformity in accordance with Section 15.101(c)(4)
    - It contains a compliance information statement as described in Section 2.1077(b)
    - Conforms with the labelling requirements in Section 15.19(b)(ii) "Assembled from tested components (Complete system not tested)"
    - It conforms with the required information to end users described in Sections 15.21, 15.27 and 15.105.

FCC Labeling for an Implantable Device

QUESTION: Our company manufactures a Part 15 device used for medical purposes and the device is implanted. How do we accommodate the FCC labeling requirement for such a device?

ANSWER: The labeling requirements for an implanted medical intentional radiator operating under Part 15 are contained in Section 2.925(e) and Section 15.19. The rules state that where a permanently attached label is not desirable or feasible, such as on an implanted device, then an alternative method may be used, if approved by the FCC. The manufacturer may place the FCC ID on the PC board inside the case (even if it has to be in very small type) and in the instruction manual. The FCC ID is then in the manual and can also be found somewhere on the equipment in case the manual is not available.

INTERNATIONAL UPDATE

EU: NEW CENELEC STANDARDS RELEASED THIS MONTH

This is a shortened list of the CENELEC standards published during the past month:

- **EN 61000-3-3:2008** (9/30/2008) Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection
- **EN 60335-2-5:2003/A2:2008** (10/1/2008) Household and similar electrical appliances - Safety -- Part 2-5: Particular requirements for dishwashers
- **EN 60335-2-14:2006/A1:2008** (10/1/2008) Household and similar electrical appliances - Safety -- Part 2-14: Particular requirements for kitchen machines
- **EN 60335-2-98:2003/A2:2008** (10/2/2008) Household and similar electrical appliances - Safety -- Part 2-98: Particular requirements for humidifiers
- **EN 60335-2-75:2004/A2:2008** (10/2/2008) Household and similar electrical appliances - Safety -- Part 2-75: Particular requirements for commercial dispensing appliances and vending machines
- **EN 60335-2-60:2003/A2:2008** (10/2/2008) Household and similar electrical appliances - Safety -- Part 2-60: Particular requirements for whirlpool baths and whirlpool spas
- **EN 60825-4:2006/A1:2008** (10/10/2008) Safety of laser products -- Part 4: Laser guards
- **EN 55014-2:1997/A2:2008** (10/10/2008) Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus -- Part 2: Immunity - Product family standard
- **EN 50106:2008** (10/21/2008) Safety of household and similar electrical appliances - Particular rules for routine tests referring to appliances under the scope of EN 60335-1

See CENELEC for additional information.

EU: NEW IEC STANDARDS RECENTLY RELEASED

This is a shortened list of the new IEC standards published during the past month:

- **ISO/IEC GUIDE 98-3** (9/30/2008) Uncertainty of measurement -- Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)
- **IEC 62433-2** (10/8/2008) EMC IC modelling - Part 2: Models of integrated circuits for EMI behavioural simulation - Conducted emissions modelling (ICEM-CE)
- **CISPR 15-am2** (10/8/2008) Amendment 2 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- **IEC 60601-2-16 Corr.1** (10/8/2008) Corrigendum 1 - Medical electrical equipment - Part 2-16: Particular requirements for basic safety and essential performance of haemodialysis, haemodiafiltration and haemofiltration equipment
- **IEC 61984** (10/8/2008) Connectors - Safety requirements and tests
- **IEC 60255-11** (10/8/2008) Measuring relays and protection equipment - Part 11: Voltage dips, short interruptions, variations and ripple on auxiliary power supply port
- **CISPR 16-SER** (10/12/2008) Specification for radio disturbance and immunity measuring apparatus and methods - ALL PARTS
- **CISPR 16-2-1** (10/13/2008) Specification for radio disturbance and immunity measuring apparatus and methods - Part 2- 1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements
- **IEC 61000-4-30** (10/13/2008) Electromagnetic compatibility (EMC) - Part 4-30: Testing and measurement techniques - Power quality measurement methods
- **IEC 80601-2-59** (10/21/2008) Medical electrical equipment - Part 2-59: Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening

See IEC for additional information.

EU: NEW ETSI STANDARDS RELEASED THIS MONTH

This is a shortened list of the new ETSI standards published during the past month:

- ETSI TS 143 064 V7.10.0 (October 2008) Digital cellular telecommunications system (Phase 2+); General Packet Radio Service (GPRS); Overall description of the GPRS radio interface; Stage 2 (3GPP TS 43.064 version 7.10.0 Release 7)
- ETSI TS 102 759 V1.1.1 (October 2008) Digital Radio Mondiale (DRM); AMSS Distribution Interface (ASDI)
- ETSI TS 123 060 V8.1.0 (October 2008) Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS); Service description; Stage 2 (3GPP TS 23.060 version 8.1.0 Release 8)
- ETSI TS 125 113 V8.3.0 (October 2008) Universal Mobile Telecommunications System (UMTS); Base station and repeater electromagnetic compatibility (EMC) (3GPP TS 25.113 version 8.3.0 Release 8)
- ETSI TS 182 011 V1.2.1 (October 2008) Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); XML Document Management; Architecture and functional description [3GPP TS 23.511, Release 7 modified]
- ETSI TS 182 011 V2.1.1 (October 2008) Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); XML Document Management; Architecture and functional description [3GPP TS 23.511, Release 8 modified]
- ETSI TS 123 401 V8.2.0 (October 2008) Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access (3GPP TS 23.401 version 8.2.0 Release 8)
- ETSI TS 123 401 V8.3.0 (October 2008) Universal Mobile Telecommunications System (UMTS); General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access (3GPP TS 23.401 version 8.3.0 Release 8)
- ETSI TS 124 008 V8.2.0 (October 2008) Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Mobile radio interface Layer 3 specification; Core network protocols; Stage 3 (3GPP TS 24.008 version 8.2.0 Release 8)

See new ETSI website for additional information.

FCC: ANALYSIS OF AWS-3 INTERFERENCE TESTS

On October 10, 2008, the FCC's Office of Engineering and Technology (OET) released a report entitled "Advanced Wireless Service Interference Tests Results and Analysis." The FCC initiated the above captioned proceedings to consider new rules provisions for Advanced Wireless Services. One of the principal issues in these proceedings has been the potential for harmful interference from Advanced Wireless Service-3 (AWS- 3) operations in the 2155 - 2180 MHz band to Advanced Wireless Service-1 (AWS-1) operations in the band 2110 - 2155 MHz, particularly the potential for interference between mobile devices. FCC staff, together with interested parties, performed laboratory bench tests to investigate this interference potential on September 3-5, 2008 at a test facility in Seattle, Washington. The OET published the raw data from these tests on September 12, 2008. The currently released report discusses the test results of the laboratory bench tests that characterize the ability of mobile receivers to reject interference under various technical conditions. The report also analyzes the laboratory bench tests to assess the potential for harmful interference between mobile devices under typical operating conditions and recommends standards to minimize this interference potential. Test Report Link

EU: NEW STANDBY AND OFF-MODE STANDARD

The Regulatory Committee established by the Ecodesign for Energy Using Products Framework Directive (EuP), has proposed its first Implementing Measure relating to standby and off-mode of household and office equipment. The standard would require reduction in maximum power levels, resulting in decreased electricity usage and resulting energy savings.

The proposal, after translation into all official Community languages, will be sent to the Council and European Parliament for further review. If the Parliament has no objections, it will be adopted by the Commission and published in the EU Official Journal in late 2008/early 2009. Producers and importers will need to be compliant with the requirements by late 2009, or within a year of the Official Journal publication. Link

CONTACT RHEIN TECH FOR YOUR INTERNATIONAL REGULATORY APPROVALS

Rhein Tech Laboratories' worldwide homologation services offer the best strategy for gaining product approval in a large number of target countries. In addition, we reduce the number of emissions, immunity, and product safety tests required by defining the minimum subset of regulatory standards at the onset, thus reducing the time and cost to enter multiple target countries. We offer research and approvals in over 50 countries.

ABOUT US

RTL has provided EMC compliance engineering & testing services since 1988 and has a superior reputation with both the Federal Communications Commission and others in the industry. RTL provides testing services to meet the emissions, immunity, and safety requirements of the European EMC Directive and the EU R&TTE Directive, all FCC rules and regulations, VCCI (Japan), ACMA (Australia), and other international standards.

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