New Product Safety Requirements for ITE in Taiwan

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SIEMIC Laboratories, Inc.
New Safety Requirements for ITE in Taiwan

- **Taiwan BSMI**
  - New product list
  - New safety requirements for ITE
  - Procedure from CB to CNS
  - New documentation requirements
  - New CNS standards
  - Voluntary Certification System
Division 6 (BSMI)

- Electro-technical, Electromagnetic Department 2 has been changed its functions w.e.f. July 2004.
Conformity Assessment

- Type Approval (TA)
- Registration of Product Certification (RPC)
- Declaration of Conformity (DOC)
Designated Product Safety Test Labs

- For ITE
  - Taiwan: BSMI designated third party labs
  - Oversea: Under IECEE CB Scheme
    - NCB assigned CBTL, with registration at BSMI
- For Audio/Video Products
  - Taiwan: BSMI designated third party labs
- For home appliances
  - Taiwan: BSMI designated third party labs
BSMI Labeling

Type Approval: T33724

Registration of Product Certification: R33724

Declaration of Conformity: D33724
符合性聲明指定代碼申請書

報名單位：
聯絡地址：

聯絡人：
傳真：

檢附資料(依報名義務人身分至少勾選乙項，影印本需蓋章)：
✓營利事業登記證影印本；統一編號：80620788

備註：

申辦人檢附資料：

申辦人代碼影印本；申請者：

申辦人身分證影印本；身分證號碼：

科(課)長：

承辦人：

登記費新台幣壹仟元

收據號碼：19885

注：1.本申請書為一式兩份，一份本局留存，一份本局蓋章後領回。
2.已取得「驗證登錄指定代碼」者，得以該碼作為符合性聲明之指定代碼。

BSMI Reg. No. D33724
New Safety Requirements for ITE in Taiwan

Additional Products’ List
Additional Product List

- HDTV (RPC & TA)
- Laser Disk Player (RPC & TA)
- Digital recorder/player, Laser player (RPC & TA)
- Digital Video Camera (DoC)
- Digital Camera (DoC)

- Any accessories that are required for TA or RPC, such as Power Adaptor, the accessory must follow the regulation.
Time Table

- 2003.7.1 (Plan)
- 2004.1.1 Announcement
- 2004.7.01 Implementation
- 2005.7.1 Enforcement
- 2006.7.1

Digital recorder/player
Laser Player
Digital Camera, Digital Video Camera
Safety Requirements for ITE
Safety Requirements for ITE

- Add Safety Requirements for ITE

- Announced in November 2004
- Enforced from July 1, 2005
Safety Requirements for ITE

◆ Add Safety Requirements for ITE

- Announced in November 2004
- Enforced from July 1, 2005
Scopes

ITE (currently under EMC) that uses AC power or Transformer, SPS, Safety Requirement is enforced.

Note: I. No external power, or computer internal accessories, plug-in cards, mother boards, no safety requirement.
II. Accessories that are under RPC or TA, regulation must be followed, e.g. DSC/DV’s accessories.
Scope

- Transformers for ITE, Switching Power Supply, now require RPC.

- Calculator (not including external power adaptor), internal CD Drive, Mother board and plug-in cards, etc. (total of 7 types) are not listed in the new Safety requirement.
New Safety Requirements for ITE in Taiwan

Technical Requirements
Technical Requirements (Safety for ITE)

- Standards
- Report Format for Type Testing
- Special Test Requirements
- Technical documents
- Labeling
- Notes
Standards

1. Safety Standard for ITE:
   - Based on CB, it is still allowed to use CNS 14336(1999) (IEC 60950-1998) but with additional deviations testing

2. Safety Standard for Audio/Video Products:
   (IEC 65 1985 +Amd 1,2,3 )(CRT TV Display, etc.)
   CNS 14408 1999 (IEC 60065 1995 Ver. 6)
   (New item)
   Draft CNS 14408 (IEC60065 2001 Ver. 7)

- **Clause 1.4.5 – Voltage**
  - Single phase 220V or three phase 380/440V
    (Note: IEC – single phase 220V or three phase 400V)
- **Clause 1.4.6 – Frequency**
  - 60Hz (Note: No 50Hz)
- **Clause 1.7.1 – Rated power**
  - Not allowed of labeling as 230V, 110V, 200V, etc.
- **Clause 1.7.5 – Output power**
  - Accompanied outlet must comply with CNS 690 with BSMI Certification

- Clause 2.3.5 – Supporting equipment power frequency
  - 60 Hz, No 50 Hz
- Clause 3.2.4 – Cord Set
  - Must comply with CNS 6797 or CNS_(IEC 60309) (IEC 60320) (Must have BSMI Certificate)
- Clause 3.2.5.1, Table 3B – Conductors of the power cord
  - Minimum 0.75 mm², Not allowed for 0.5 mm²
- Clause 4.3.5 - connection of plugs and sockets
  - Must comply with CNS690 or CNS 6797(IEC 60083 or IEC 60320) (must have BSMI Certificate)

- Appendix D.2
  - Only use 60Hz, no 50Hz

- Appendix G, Table G1
  - Voltage 110/220 V (120/208 V or 120/240 V)
  - Voltage 110/440 V or 200/440 V (230/400 V or 277/480 V)
  - Voltage 400/600 V (400/690 V)
Type Test Report Format

- Format
  - Comply with CNS requirements
  - Similar to CB Format
CNS 14408 vs IEC 60065

- Differences are Similar to CNS 14336 vs IEC 60950
  - Frequency
  - Voltage
Power Adaptor

- Both EMC & Safety are required
  - Sell with system or separately
  - DV, DSC, if come with ADAPTOR, the ADAPTOR must pass EMC & Safety
Safety Requirements for ITE in Taiwan

CB REPORT
convert to
CNS REPORT
Designated lab and report

Related CB

● ITE (not including copy machines): IEC 60950
● UPS:
  IEC 60950 or IEC 62040-1-1 or IEC 62040-1-2
● Power supply/Power adaptor/SPS:
  IEC 60950 or IEC 60065

● Multi-media (ITE+Audio/Video)
  IEC 60950 (adding IEC 60065)
Safety Standards

- ITE Safety standard
  - CNS 14336 : 94 (2005)
  - Equivalent to IEC 60950-1: 2001

- Audio/Video equipment and power supply
  - CNS 14408 : 94
  - Equivalent to IEC 60065 7th: 2001
Restriction on CB REPORT

- ITE
  - IEC 60950-1: 2001
  - IEC 60950: 1999 (3rd edition) (Before July 1, 2006)

- Audio/Video and Power Supply
  - IEC 60065: 2001 (7 edition)

- NCB & CBTL must be registered with BSMI
Documents - I

- One Sample
- CB Report
- Model names and Differences
- User Manual in Chinese
- Label
- Photos (Exterior view, Interior view, Critical comonents, 4x6 or larger)
Documents - II

- Circuit Diagram or Schematic (power supply, D/A inverter, hazardous voltage circuit, battery charging and discharging circuit, output connector area circuit, ...)

- PCB Artwork drawing or Layout (power supply, D/A inverter, hazardous voltage circuit, battery charging and discharging circuit, ...)

Datasheets and Safety Certificates of Safety Critical Components (generally the same as what are listed in the CB)

Power cord and adaptor must have BSMI ROC and submitted with BSMI certificate
New List of Documents

Effective from March 1, 2007

List of Documents for Taiwan BSMI Certifications

(1) Company Name and Address
(2) Product Name
(3) Product Model Name(s)
(4) Factory locations and detail address
(5) Taiwan Local Representative’s Contact (Name/Tel/Email)
(6) CB Certificate and CB Test Report from BSMI registered NCB/CBTL
(7) BSMI Certificate of the Power Supply
(8) BSMI Certificates of the Power Cord Assemblies (Plug, Cable, Connector)
(9) User’s Manual in Traditional Chinese (for Class B Devices) or in English (for Class A Device)
(10) Rating Labels
New List of Documents

(10) Rating Labels
(11) Product Assembly Drawings
(12) Product Circuit Diagrams and Block Diagrams
(13) PCB Layouts and Insulation Grade of the Insulators
(14) List of Critical Components
(15) Photographs of the Products with Ruler indicating the physical dimensions
(16) Photographs of the Critical Parts with Ruler indicating the dimensions
(17) The Safety certificates based on IEC standards for the following components (if used in the product):
   - Power Switches
   - Apparatus Inlets
   - Fuses, Resistors (across primary and secondary)
   - X Capacitors and Y Capacitors
   - Temperature switches/fuses/breakers
New List of Documents

- Relays
- Photo couplers

(18) The Safety Certificate based on IEC or UL standards for the followings
  - Printed Circuit Boards (PCBs)
  - Plastic Materials

(19) The Specifications of the following critical components (if used in the product):
  - Transformers
  - Inductor Coils
  - Bobbin and Insulation materials
  - PCB Board
  - Wirings
  - Glue
  - Motor
  - Plastic materials
New List of Documents

These should be provided in the form of the following forms:

<table>
<thead>
<tr>
<th>電路板標示</th>
<th>零件項目</th>
<th>廠牌/型號</th>
<th>規格</th>
<th>安規號碼</th>
<th>附件編號</th>
</tr>
</thead>
</table>

PS: For Component's Certificates, it must includes (i) component's model name (ii) Component's Spec, (iii) Component's tested standard.

Online printout of certificate will be not accepted if it does not include above three information.
CB to CNS Report

CB issued before “Implement Date”

CB issued before “implement date”, it is allowed to make some self declaration on some documents

CB issued after “Implement Date”

CB issued after “implement date”, all submitted documents must follow BSMI requirements

New list of documents enforced
New CNS Standards

Update BSMI Certificate with new standards

Implemented 2007-1-1
Enforced 2007-7-1

CNS 13438 (95), 2006
CNS 14336 (94), 2005
Safety Requirements for ITE in Taiwan

Voluntary Product Certification
Background

BSMI

Protect Consumers

Consumer

Economic Development

Complete Product certification

Mfg
Overview

- BSMI as Administrative Agency
  - Based on compulsory certification experience
  - Government agency to admin the program
  - Voluntary based program
- Procedure is similar to RPC
- Documents equivalent to RPC
- Market surveillance
Certification Mark

Various Marks

- EMC
  - 0001234-BSMI

- M
  - 0005678-ETC

- S
  - 0004321-ETC

- E
  - 0009876-TERTEC

- H
  - 0002468-BSMI

- C
  - 0001357-BSMI
Initial List of VPC Products

- Cellular Phone Charger & Battery (Safety)
- Medical Devices (EMC & Safety)
- 10 types of electrical & Electronic devices (WEEE Directive and RoHS Directive)
- Vehicles, Automobile parts (EMC)
## Detail Product List (Draft)

### Safety

<table>
<thead>
<tr>
<th>成品對零組件驗證配套措施及實施時程</th>
<th>檢驗標準</th>
</tr>
</thead>
</table>
| 產品名稱：家用電器開關         | IEC 61058-1 (2001-11)  
IEC 61058-2-1 (1992-06)  
IEC 61058-2-1-am1 (1995-10)  
IEC 61058-2-4 (1995-06)  
IEC 61058-2-5 (1994-05)     |
| 實施時程：2005.07.01          |                                                                          |
| 產品名稱：攜帶式二次鋰電池   | IEC 61960-1 (2000-11)  
IEC 61960-2 (2001-09)  
CNS14857-1 (民國93年版)  
CNS14857-2 (民國93年版)     |
| 實施時程：2006.01.01          |                                                                          |
| 產品名稱：設備用斷路器        | IEC 60934 (2000-10)                                                    |
| 實施時程：2006.01.01          |                                                                          |
| 產品名稱：家用自動控制器      | IEC 60730-1 (1999-04)  
IEC 60730-2-7 (1990-10)  
IEC 60730-2-7-am1 (1994-01)  
IEC 60730-2-9 (2000-05)  
IEC 60730-2-9-am1 (2002-08) |
| 實施時程：2006.01.01          |                                                                          |
| 產品名稱：溫度熔線            | CNS14399 (民國89年版)  
IEC60691 (2001-03)          |
| 實施時程：2006.01.01          |                                                                          |
## Safety

<table>
<thead>
<tr>
<th>產品名稱</th>
<th>檢驗標準</th>
<th>實施時程</th>
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<tbody>
<tr>
<td>電子設備用固定式電容器</td>
<td>IEC60384-1 (1993-03)</td>
<td>2006.01.01</td>
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<td>IEC60384-14 (1993-06)</td>
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<td></td>
<td>IEC60384-14-am1 (1995-06)</td>
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<tr>
<td>小型保險絲</td>
<td>IEC 60127-1 (1999-06)</td>
<td>2006.01.01</td>
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<td>IEC 60127-2 (1989-07)</td>
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<td></td>
<td>IEC 60127-2-am1 (1995-08)</td>
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<td>IEC 60127-2-am2 (2000-09)</td>
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<td></td>
<td>IEC 60127-3 (1988-12)</td>
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<tr>
<td></td>
<td>IEC 60127-3-am1 (1991-12)</td>
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<tr>
<td>家用及類似用途低電壓連接裝置</td>
<td>IEC60998-1 (2002-12)</td>
<td>2006.01.01</td>
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<td>IEC60998-2-1 (2002-12)</td>
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<td>低電壓連接裝置</td>
<td>IEC60999-1 (1999-11)</td>
<td>2006.01.01</td>
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<tr>
<td></td>
<td>IEC60999-2 (2003-05)</td>
<td></td>
</tr>
<tr>
<td>扁平快速連接端子</td>
<td>IEC61210 (1993-05)</td>
<td>2006.01.01</td>
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</table>
# Detail Product List (Draft)

## EMC

<table>
<thead>
<tr>
<th>產品名稱</th>
<th>檢驗標準</th>
</tr>
</thead>
<tbody>
<tr>
<td>車輛整車</td>
<td>ECE R10</td>
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<tr>
<td>1.大型車(3.5噸以上)</td>
<td>(引用CISPR 12、CISPR 25、ISO 11451-1、ISO 11451-2)</td>
</tr>
<tr>
<td>2.小型車</td>
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<tr>
<td>3.機車</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>車輛零組件</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.引擎管理系統</td>
<td>1. CISPR 25</td>
</tr>
<tr>
<td>2.啓動及電力系統</td>
<td>2. ISO 7637-1~3</td>
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<tr>
<td>3.傳動控制系統</td>
<td>3. ISO 10605</td>
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<tr>
<td>4.車體控制系統</td>
<td>4. ISO 11452-1~7</td>
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<td>5.車室控制系統</td>
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<td>6.燈光照明系統</td>
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<td>7.防盜系統</td>
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<td>8.音響及娛樂系統</td>
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<td>9.通訊資訊系統</td>
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<tr>
<td>10.安全駕駛輔助系統</td>
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</tr>
</tbody>
</table>
Acknowledgement

Special thanks to:

Mr. HC Hsieh
Director of Div. 6 (BSMI)
THANK YOU

For more information, visit:

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www.bsmi.gov.tw

Email: Leslie.Bai@siemic.com