



Ref. Certif. No.

JPTUV-040183-M2

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT
(IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D'ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC

Product
Produit

LCD Monitor

Name and address of the applicant
Nom et adresse du demandeur

Top Victory Electronics (Taiwan) Co., Ltd.
10F., No. 230, Liancheng Rd.
Zhonghe Dist., New Taipei City, 23553 Taiwan

Name and address of the manufacturer
Nom et adresse du fabricant

NEC Display Solutions, Ltd.
4-28, Mita 1-chome, Minato-ku
Tokyo, 108-0073 JAPAN

Name and address of the factory
Nom et adresse de l'usine

See additional page(s)

Rating and principal characteristics
Valeurs nominales et caractéristiques principales

- 1) AC 100-240V; 50/60Hz; 0.95-0.50A; Class I
- 2) AC 100-240V; 50/60Hz; 0.80-0.45A; Class I

Trade mark (if any)
Marque de fabrique (si elle existe)

NEC

Model/type Ref.
Ref. de type

- 1) L270UL, EA273WM(C), EA273WM-BK(C)
- 2) L240UM, EA243WM(C), EA243WM-BK(C), EA244WMi(C),
EA244WMi-BK(C)

Additional information (if necessary)
Information complémentaire (si nécessaire)

For model differences, refer to the test report.
Re-issue of JPTUV-040183-M1 dated 26.10.2011,
due to second modification.

A sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à la

IEC 60950-1:2005+A1
National differences see test report

As shown in the Test Report Ref. No. which forms part
of this Certificate
Comme indiqué dans le Rapport d'essais numéro de
référence qui constitue une partie de ce Certificat

11025976 003

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de Certification



TÜV Rheinland Japan Ltd.
Global Technology Assessment Center
4-25-2 Kita-Yamata, Tsuzuki-ku
Yokohama 224-0021 Japan
Phone + 81 45 914-3888
Fax + 81 45 914-3354
Mail: info@jpn.tuv.com
Web: www.tuv.com

Date: 11.10.2012

Signature:

Dipl.-Ing. (FH) C. Nasca

1. TPV Technology (Beijing) Co., Ltd.
No. 10, Jiu Xian Qiao Rd.
Chao Yang District, Beijing 100016
P.R. China
2. Tatung Mexico S.A. de C.V.
Ave. Rosa Ma. Fuentes #7050
Complejo Industrial Fuentes
C.P. 32320, Cd. Juarez. Chih,
MEXICO
3. TPV Display Technology (Wuhan)
Co., Ltd.
Unique No. 11, Zhuankou Development
District of Economic Technological
Development Zone, Wuhan City 430056, P.R. China
4. TPV Electronics (Fujian) Co., Ltd.
Yuan Hong Rd., Shang-Zheng Hong-Lu
Fuding City Fujian 350301
P.R. China
5. Envision Industry of Electronic
Products Ltd.
895, Joao Marcos Pozzetti Street,
Industrial District II,
69.075-215 Manaus, Am, Brazil
6. Tatung Czech s.r.o
U Nove Hospody 4
30100 Plzen
Czech Republic
7. TPV Technology (Suzhou) Co., Ltd.,
Zhujiang Branch
No. 161, Zhujiang Road, Suzhou
New District, Suzhou City, Jiangsu
Province, P.R. China
8. Envision Industry of Electronic
Products Ltd.
Rodovia Anhanguera S/N-KM 49
13.205-700 Tijuco Preto-Jundiaí-SP-
Brazil
9. TPV Displays Polska Sp. z o.o.
ul. Zlotego Smoka 9
66-400 Gorzów Wlkp.
Poland

Additional information (if necessary)
Information complémentaire (si nécessaire)

Report Ref. No.: 11025976 003



Date: 11.10.2012

Signature:

Dipl.-Ing. (FH) C. Nasca

10. L&T Display Technology (Fujian) Ltd.
Optoelectronic Park, Rongqiao
Economic and Technological
Development Zone
Fuqing, Fujian 350301, P.R. China
11. TPV Display Technology (Beihai)
Co., Ltd.
China Electronic Beihai Industry
Park, Northeast of the Crossing
Between Taiwan Road and Jilin Road, Beihai City, Guangxi, P.R. China
12. Envision Industry of Electronic
Products Ltd.
Av Torquato Tapajós 7503,
Galpão : II Bloco: B-Condomínio
de Galpões-Tarumã-Manaus, AM, Brazil

Additional information (if necessary)
Information complémentaire (si nécessaire)

Report Ref. No.: 11025976 003



Date: 11.10.2012

Signature:

Dipl.-Ing. (FH) C. Nasca



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements	
Report Number	11025976 003
Date of issue.....	October 09, 2012
Total number of pages	9
CB Testing Laboratory	TÜV Rheinland (Shenzhen) Co., Ltd.
Address	3 & 4 F, Cybio Technology Building No. 1, Langshan No. 2 Road South, 5th Industrial Area, High-Tech Industry Park North, Nanshan District, 518057, Shenzhen, P.R. China
Applicant's name	Top Victory Electronics (Taiwan) Co., Ltd.
Address	10F., No. 230, Liancheng Rd., Zhonghe City, Taipei County 23553 Taiwan
Manufacturer's name	NEC Display Solutions, Ltd.
Address	4-28, Mita 1-chome, Minato-ku, Tokyo, Japan
Test specification:	
Standard	IEC 60950-1:2005 (2nd Edition); Am 1:2009
Test procedure	CB Scheme
Non-standard test method.....	N/A
Test Report Form No	IEC60950_1B
Test Report Form(s) Originator	SGS Fimko Ltd
Master TRF.....	Dated 2010-04
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Test item description	LCD Monitor
Trade Mark	NEC
Manufacturer	See above manufacturer
Model/Type reference.....	1) L270UL, EA273WM (C), EA273WM-BK(C); 2) L240UM, EA243WM(C), EA243WM-BK(C); EA244WMI(C), EA244WMI-BK(C)
Ratings	1) 100-240 Vac, 50/60 Hz, 0.95 – 0.50 A ; 2) 100-240 Vac, 50/60 Hz, 0.80 – 0.45 A

Testing procedure and testing location:		
☒	CB Testing Laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.
Testing location/ address		3 & 4 F, Cybio Technology Building No. 1, Langshan No. 2 Road South, 5th Industrial Area, High-Tech Industry Park North, Nanshan District, 518057, Shenzhen, P.R. China
☐	Associated CB Laboratory:	
Testing location/ address		
Tested by (name + signature)		Steven Lin
Approved by (name + signature)		Aegean Li
☐	Testing procedure: TMP	
Testing location/ address		
Tested by (name + signature)		
Approved by (name + signature)		
☐	Testing procedure: WMT	
Testing location/ address		
Tested by (name + signature)		
Witnessed by (name + signature)		
Approved by (name + signature)		
☐	Testing procedure: SMT	
Testing location/ address		
Tested by (name + signature)		
Approved by (name + signature)		
Supervised by (name + signature)		
☐	Testing procedure: RMT	
Testing location/ address		
Tested by (name + signature)		
Approved by (name + signature)		
Supervised by (name + signature)		

List of Attachments (including a total number of pages in each attachment):

- Photo documentation (1 page).

Summary of testing:**Tests performed (name of test and test clause):**

name of test	test clause No.
Input Current Test	1.6.2

The EUT passed the test.

Testing location:

All tests as described in Test Case and Measurement Sections were performed at the laboratory described on cover page.

Summary of compliance with National Differences

See original report 11025976 001 for National Differences.

Copy of marking plate

NEC MultiSync EA244WMi LCD MONITOR
VOLTS 定格電圧: 100-240V~, AMPERES 定格電流: 0.80-0.45A(1.0A for Mexico), FREQUENCY 定格周波数: 50/60Hz
(Model: L240UM)

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE.

ATTENTION: AFIN DE PREVENIR DE TOUT CHOC ELECTRIQUE, NE PAS OUVRIR CE BOITIER. AUCUNE PIECE INTERNE NE PEUT-ETRE CHANGEE PAR L'UTILISATEUR.

ACHTUNG: ZUR TRENNUNG VOM NETZ IST DER NETZSTECKER AUS DER STECKDOSE ZU ZIEHEN. GERÄT NICHT ÖFFNEN. ES SIND KEINE DURCH DEN BENUTZER AUSWECHSELBAREN TEILE IM GERÄT VORHANDEN.

PRECAUTION: PARA PREVENIR DESCARGA ELÉCTRICA, NO QUITÉ EL RECINTO. NINGUNAS PIEZAS DEL USUARIO SERVICABLE ADENTRO.

VAROITUS: LAITE ON LUOTETTAVA SUOJAMAADOITUSKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.

WARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.

ADVARSEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.

NEC Display Solutions, Ltd. 4-28, Mita 1-chome, Minato-ku, Tokyo, Japan






For Japan only

高圧注意

サービスマン以外の方は分解しないでください。内部には高電圧部分があり、万一さわると危険です。

感電注意

電源コードのアースリ線は必ず接地ください。故障のときに感電の原因になります。










THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CAUSING EQUIPMENT REGULATIONS.

CET APPAREIL NUMÉRIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU RÈGLEMENT SUR LE MATÉRIEL BRÛLER DU CANADA.

Fabriqué en Chine
Fabricado en China
MADE IN CHINA

NEC MultiSync EA244WMI LCD MONITOR
VOLTS 定格電圧: 100-240V~, AMPERES 定格電流: 0.80-0.45A(1.0A for Mexico), FREQUENCY 定格周波数: 50/60Hz
(Model: L240UM)

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE. NO USER-SERVICEABLE PARTS INSIDE.

ATTENTION: AFIN DE PREVENIR DE TOUT CHOC ELECTRIQUE, NE PAS OUVRIR CE BOITIER. AUCUNE PIECE INTERNE NE PEUT-ETRE CHANGEE PAR L'UTILISATEUR.

ACHTUNG: ZUR TRENNUNG VON NETZSTROM DER ZETZSTECKER AUS DER STECKDOCKE ZU ZIEHEN. GERÄT NICHT ÖFFNEN. ES SIND KEINE DURCH DEN BENUTZER AUSWECHSELBAREN TEILE IM GERÄT VERHÄNDLICH.

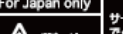
PRECAUCIÓN: PARA PREVENIR DESCARGA ELÉCTRICA, NO QUITE EL RECINTO. NINGUNAS PIEZAS DEL USUARIO SERVICABLE ADENTRO.

VAROITUS: LAITE ON LITETTÄVÄ SUOJAMAADOITUSKOSKETTIMILLA VARUSTETTUUN PISTORASMAAN.

WARNING: APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.

ADVARSSEL: APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.



 XXXXXX-XX

For Japan only

高圧注意

サービスエリア内の方は分解しないであください。内部には高圧電圧部分があり、万一さわると危険です。

感電注意

電源コードのフェーズ・N線は必ず抜くください。接地のせいで感電の原因になります。

PG+ B202

cUL LISTED

ETC 100W 1000V

N56



MINI-DC-15 PIN D-SUB 15P INTERFACE

TÖV Rheinland

BSI B5841387

VCCI



NEC Display Solutions, Ltd. 4-28, Miya 1-chome, Minato-ku, Tokyo, Japan

THIS CLASS B DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE-CALLING EQUIPMENT REGULATIONS.

CEI APPAREIL NUMÉRIQUE DE LA CLASSE B RESPECTE TOUTES LES EXIGENCES DU RÈGLEMENT SUR LE MATÉRIEL BRUIILLER AU CANADA.

XXXXXXXX XXXXXXXXXX-XX-XX

PS E

Fabricated in China
Fabriqué en Chine
MADE IN CHINA

NEC MultiSync EA244Wmi 液晶显示器 / LCD MONITOR

型号：EA244Wmi(C)

VOLTS 输入电压：100-240V~, AMPERES 电流：0.80-0.45A, FREQUENCY 工作频率：50/60Hz

注意：本显示器内有高压，非专业人员，请勿自行打开后盖，以免危险！

**CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE.
NO USER-SERVICEABLE PARTS INSIDE.**

NEC Display Solutions, Ltd. 日本国东京都港区三田一丁目4番28号






生产厂：福建捷联电子有限公司
生产地址：福建省福清市元洪路上郊
中国制造 / Made in China

XXXXXXXX
XXXXXXXXXXXXXX
□

NEC MultiSync EA244WMI 液晶显示器 / LCD MONITOR

型号：EA244WMI-BK(C)

VOLTS 输入电压：100-240V~, AMPERES 电流：0.80-0.45A, FREQUENCY 工作频率：50/60Hz

注意：本显示器内有高压，非专业人员，请勿自行打开后盖，以免危险！

CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE ENCLOSURE.
NO USER-SERVICEABLE PARTS INSIDE.

NEC Display Solutions, Ltd. 日本国东京都港区三田一丁目4番28号






生产厂：福建捷联电子有限公司
生产地址：福建省福清市元洪路上郑

中国制造 / Made in China

XXXXXXXXXXXXXXXXXXXX

See others in original reports 11025976 001-002.

Note: The above label is a draft of an artwork of marking plate pending approval by National Certification Bodies and it shall not be affixed to products prior to such an approval.

Test item particulars:	
Equipment mobility.....:	☒ movable (for unit with base stand) ☐ hand-held ☐ transportable ☒ stationary (for unit without base stand) ☐ for building-in ☐ direct plug-in
Connection to the mains	☒ pluggable equipment ☒ type A ☐ type B ☐ permanent connection ☒ detachable power supply cord ☐ non-detachable power supply cord ☐ not directly connected to the mains
Operating condition.....:	☒ continuous ☐ rated operating / resting time:
Access location	☒ operator accessible ☐ restricted access location
Over voltage category (OVC)	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Mains supply tolerance (%) or absolute mains supply values	±10
Tested for IT power systems	☒ Yes ☐ No
IT testing, phase-phase voltage (V)	230 Vac
Class of equipment	☒ Class I ☐ Class II ☐ Class III ☐ Not classified
Considered current rating of protective device as part of the building installation (A)	16 (20 for North America)
Pollution degree (PD)	☐ PD 1 ☒ PD 2 ☐ PD 3
IP protection class	IPX0
Altitude during operation (m)	Up to 3658
Altitude of test laboratory (m)	Less than 2000
Mass of equipment (kg)	1) Approx. 6.91 (with base stand); 2.82 (for base stand) for models L270UL, EA273WM (C), EA273WM-BK(C). 2) Approx. 6.77 (with base stand) ; 2.82 (for base stand) for models L240UM, EA243WM(C), EA243WM-BK(C), EA244WMI(C), EA244WMI-BK(C)
Possible test case verdicts:	
- test case does not apply to the test object : N/A (or N)	
- test object does meet the requirement..... : P (Pass)	
- test object does not meet the requirement..... : F (Fail)	
Testing:	
Date of receipt of test item	October, 2012
Date(s) of performance of tests	October, 2012

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(see Enclosure #)" refers to additional information appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 6.2.5 of IEC60950-1:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....

☒ Yes

☐ Not applicable

When differences exist; they shall be identified in the General product information section.

Name and address of factory (ies) : Refer to report no. 11025976 001.

General product information:

Description of change(s):

1. Correct typing error of Y capacitor type designation from "C925" to "C921" in table 1.5.1 in original report 11025976 001.
2. Change the manufacturer address to "4-28, Mita 1-chome, Minato-ku, Tokyo, Japan".
3. Add alternative main board 715G5242 type B and alternative panel LM240WU* (LG Display) for 24" models L240UM, EA243WM(C), EA243WM-BK(C). Meanwhile, original main board 715G5242 defined as type A. 715G5242 type B was similar to 715G5242 type A except for some change on the layout and slight change on components.
4. Add new models EA244WMi(C), EA244WMi-BK(C) which were identical to above mentioned model L240UM except for type designation.

For the above described change(s) the following was considered to be necessary:

Change	Testing	Comments
1.	N/A	See table 1.5.1 for correct information.
2.	N/A	N/A
3.-4.	Input test	See following pages for test details. Due to the measured power consumption with main board 715G5452 type B was not higher than original main board 715G5452 type A, no heating test necessary.

History of amendments and modifications:

Ref. No. 11025976 001, dated September 08, 2011 (original test report)

Ref. No. 11025976 002, dated October 21, 2011 (modification)

Ref. No. 11025976 003, dated October 09, 2012 (modification)

Abbreviations used in the report:

- normal conditions	N.C.	- single fault conditions	S.F.C
- functional insulation	OP	- basic insulation	BI
- double insulation	DI	- supplementary insulation	SI
- between parts of opposite polarity	BOP	- reinforced insulation	RI

Indicate used abbreviations (if any)

IEC 60950-1/Am1					
Clause	Requirement + Test			Result - Remark	Verdict
1.5.1	TABLE: list of critical components				P
Object/part no.	Manufacturer/ trademark	Type/model	Technical data	Standard	Mark(s) of conformity
LCD panel (for all 24" models)	Samsung	LT*240***** (* = 0-9, A-Z, a-z or blank)	24" TFT-LCD (LED backlight type)	--	--
	LG Display	LM240WU* (* = 0-9, A-Z, a-z or blank)	24" TFT-LCD (LED backlight type)	--	--
Switching Power supply with LED driver board: 715G5116 by TPV					
Y- Capacitors (C921, C901, C902, C923, C921) (Y1 or Y2 type) (Optional)	Walsin	AC, AH	Max. 4700 pF, min. 250 Vac	IEC/EN 60384- 14:2005	VDE
	Haohua	CT 7	Max. 4700 pF, min. 250 Vac	IEC 60384-14	VDE
	TDK	CS, CD	Max. 4700 pF, min. 250 Vac	IEC/EN 60384- 14:2005	VDE
	Murata	KH, KX	Max. 4700 pF, min. 250 Vac	IEC/EN 60384- 14:2005	VDE
	JYA-NAY	JY	Max. 4700 pF, min. 250 Vac	IEC 60384-14	VDE
	JYA-NAY	JN	Max. 4700 pF, min. 250 Vac	IEC/EN 60384- 14:2005	VDE
	Hongming	F	Max. 4700 pF, min. 250 Vac	IEC 60384-14	VDE
Supplementary information:					
1. An asterisk indicates a mark that assures the agreed level of surveillance.					

1.6.2	TABLE: Electrical data (in normal conditions)					P
U (V/Hz)	I (A)	Irated (A)	P (W)	Fuse #	Ifuse (A)	Condition/status
For 24" models, test with main board 715G5242 type B						
DVI mode						
90/50	0.77	--	43.2	F901	0.77	Maximum normal load
90/60	0.77	--	43.2	F901	0.77	Maximum normal load
100/50	0.72	0.80	42.7	F901	0.72	Maximum normal load
100/60	0.72	0.80	42.7	F901	0.72	Maximum normal load
240/50	0.42	0.45	42.0	F901	0.42	Maximum normal load

IEC 60950-1/Am1						
Clause	Requirement + Test				Result - Remark	Verdict
240/60	0.42	0.45	42.0	F901	0.42	Maximum normal load
264/50	0.39	--	42.1	F901	0.39	Maximum normal load
264/60	0.39	--	42.1	F901	0.39	Maximum normal load
Supplementary information: 1. The measured input current at rated voltage shall be $\leq 110\%$ of rated current. 2. Maximum normal load: full raster screen with maximum brightness, maximum contrast, and maximum non-clipped volume of speakers with 1KHz signal, USB port loaded 0.5A.						

Type Designation: See test report
Report Number: 11025976 003

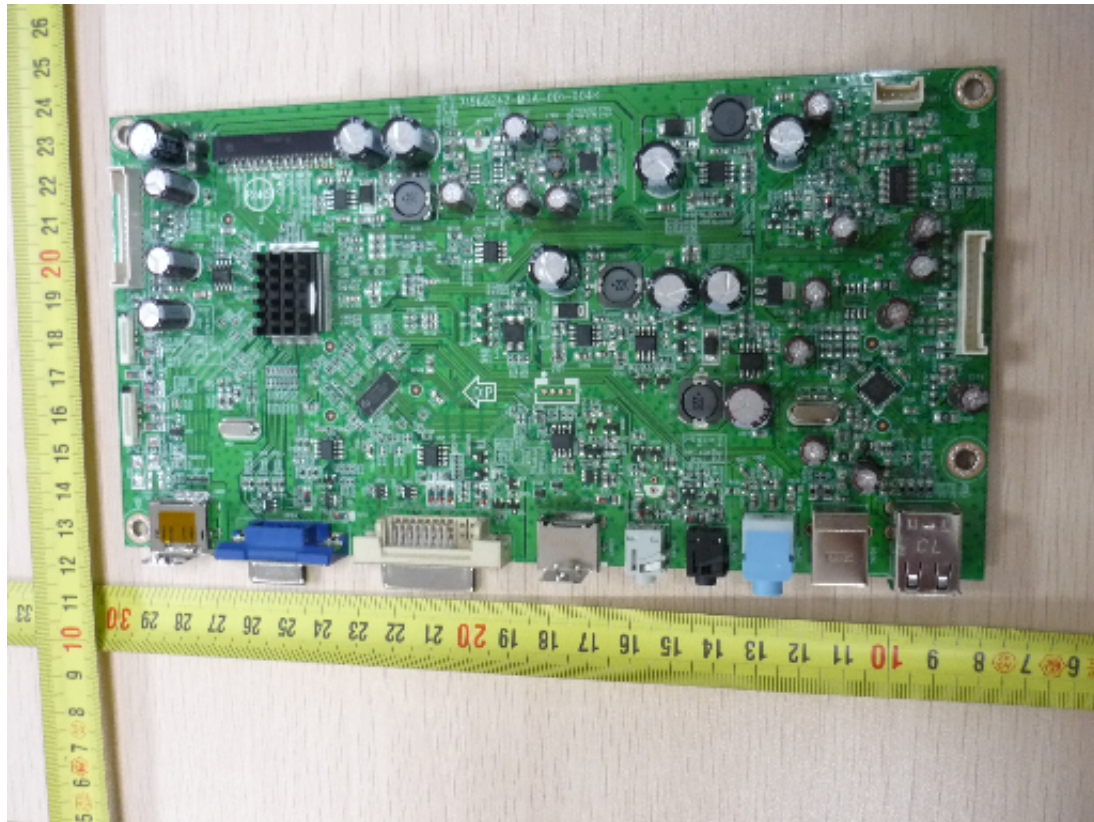


Figure 1 Main board 715G5242 type B



Figure 2 Main board 715G5242 type B