NOTICE OF COMPLETION AND AUTHORIZATION TO APPLY THE UL MARK



2014/01/02

Qbest Inc Mr. KEN WANG 1st Fl 15 Aly 22 Ln 157 Sec 5 Fuu An Rd Tainan 709, Taiwan			
Our Reference:	File E464358, Vol. X1	Project Number	4786083308
Your Reference:	T130924N01		
Project Scope:	UL/CUL Full Investigation For Switchin = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54 for single output, "D" for dual output, " E464358-A1)	ng Power Supply, model P 4, 0512, 0524 or 1224) ("x" y" denotes output voltage)	RL1201x-y (x = D or blank, y Denotes output type, blank (Report Reference No.

Dear Mr. KEN WANG:

Congratulations! UL's investigation of your product(s) has been completed under the above Reference Number and the product was determined to comply with the applicable requirements. This letter temporarily supplements the UL Follow-Up Services Procedure and serves as authorization to apply the UL Mark at authorized factories under UL's Follow-Up Service Program. To provide your manufacturer(s) with the intended authorization to use the UL Mark, you must send a copy of this notice to each manufacturing location currently authorized under File E464358, Vol. X1.

Records in the Follow-Up Services Procedure covering the product are now being prepared and will be sent in the near future. Until then, this letter authorizes application of the UL Mark for 90 days from the date indicated above.

Additional requirements related to your responsibilities as the Applicant can be found in the document "Applicant responsibilities related to Early Authorizations" that can be found at the following web-site: http://www.ul.com/EAResponsibilities

Any information and documentation provided to you involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

We are excited you are now able to apply the UL Mark to your products and appreciate your business. Feel free to contact me or any of our Customer Service representatives if you have any questions.

Very truly yours,

Herman Wu +886 2 28967790 Engineer Herman.Wu@ul.com Reviewed by:

William R. Carney 847/664-1088 Chief Engineer Director I William.R.Carney@ul.com

CC:,

NWT9C78-41D857

UL TEST REPORT AND PROCEDURE

Standard: Certification Type:	UL 60950-1, 2nd Edition, 2011-12-19 (Information Technology Equipment - Safety - Part 1: General Requirements) CSA C22.2 No. 60950-1-07, 2nd Edition, 2011-12 (Information Technology Equipment - Safety - Part 1: General Requirements) Component Recognition
CCN:	QQGQ2, QQGQ8 (Power Supplies for Information Technology Equipment Including Electrical Business Equipment)
Product:	Switching Power Supply
Model:	PRL1201x-y (x = D or blank, y = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224) ("x" Denotes output type, blank for single output, "D" for dual output, "y" denotes output voltage)
Rating:	Input: 100-240 Vac, 47-63 Hz, 6 A Output: See Enclosure ID 7-01 for details
Applicant Name and Address:	QBEST INC 1ST FL 15 ALY 22 LN 157 SEC 5 FUU AN RD TAINAN 709 TAIWAN

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

The applicant is authorized to reproduce the referenced Test Report provided it is reproduced in its entirety.

UL authorizes the applicant to reproduce the latest pages of the referenced Test Report consisting of the first page of the Specific Technical Criteria through to the end of the Conditions of Acceptability.

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Herman Wu

Reviewed by: Henry Ho

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

- B. Generic Inspection Instructions
 - i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.
 - ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.
 - iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

- The open frame power supply is incorporating power supply boards with electronic components.

- Two input terminal types in this equipment, see Enclosure ID 3-15 and appended table 1.5.1 for material details.

Model Differences

- Models PRL1201x-y (x = D or blank, y = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224) ("x" Denotes output type, blank for single output, "D" for dual output, "y" denotes output voltage) are similar to each other except for output rating, output type and some component differences.

- See Enclosure ID 7-01 for output rating details.

- See Enclosure ID 7-02 for component difference details.

Technical Considerations

- Equipment mobility : for building-in
- Connection to the mains : To be determined in the end product
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC II
- Mains supply tolerance (%) or absolute mains supply values : +10%, -10%
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class I (earthed)
- Considered current rating of protective device as part of the building installation (A) : 20 A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : Up to 2000 m
- Altitude of test laboratory (m) : less than 2000 meters
- Mass of equipment (kg) : Approx. 1.2kg

- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50 degree C
- The means of connection to the mains supply is: To be determined in the end product
- The product is intended for use on the following power systems: TN
- The equipment disconnect device is considered to be: To be determined in the end product
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual

Engineering Conditions of Acceptability

For use only in or with complete equipment where the acceptability of the combination is determined by UL LLC. When installed in an end-product, consideration must be given to the following:

- The following Production-Line tests are conducted for this product: Earthing Continuity, Electric Strength
- The end-product Electric Strength Test is to be based upon a maximum working voltage of: Primary-SELV: 300 Vrms, 440 Vpk of T3., Primary-SELV: 221 Vrms, 424 Vpk of T2., Primary-SELV: 262 Vrms, 460 Vpk of T1.
- The following secondary output circuits are SELV: All outputs
- The following secondary output circuits are at hazardous energy levels: All outputs
- The power supply terminals and/or connectors are: Suitable for factory wiring only
- The maximum investigated branch circuit rating is: 20 A
- The investigated Pollution Degree is: 2
- Proper bonding to the end-product main protective earthing termination is: Required
- An investigation of the protective bonding terminals has: Been conducted
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): Transformer (T1, T3) (Class F), Transformer (T2) (Class B)
- The following end-product enclosures are required: Electrical, Fire, Mechanical,
- The equipment is suitable for direct connection to: To be determined in the end product

Additional Information

- The tests are based on +10% and -10% tolerence and considered in compliance with +6% and -10% tolerence.

Additional Standards	
The product fulfills the re	quirements of: N/A
Markings and instruction	ons
Clause Title	Marking or Instruction Details
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number

Power rating - Model	Model Num	ber				
Fuses - Rating	Rated current and voltage and type located on or adjacent to fuse or fuseholder.					
Special Instructions to	UL Representative)				
"Inspect the transformer(s) listed in Production-Line Testing Requirements per AA1.1- (C). When the tests are conducted at other location, inspect test record and specification sheet provided by the component manufacturer. Verify the specification sheet indicates 100% routine test specified in Production-Line Testing Requirements be conducted at the component manufacturer. "						
Production-Line Testing Requirements <u>Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for</u> further information.						
	Removabl	e	V		Test Time,	
Model Compor	nent Parts	Test probe locati	ion rms	V dc	S	
All models Transfor (T1, T2,	rmer T3)	Primary to secondary	300 0	4242	1	
Earthing Continuity Tes	st Exemptions - Th	is test is not required f	for the followi	ng models:		
Electric Strength Test	Electric Strength Test Exemptions - This test is not required for the following models:					
no exemptions						
Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:						
Sample and Test Specifics for Follow-Up Tests at UL						
Model Compor	nent Material	Test	Sa	ample(s)	Test Specifics	

Zertifikat Certificate	R.
Zertifikat Nr. Certificate No.Blatt PageR 502719040001	TUVRheinland
Ihr Zeichen Client ReferenceUnser Zeichen Our ReferenceAusstellungsdatumT130924N01/CCSZTW1-KKC- 10044276 00110.01.2014	Date of Issue (day/mo/yr)
Genehmigungsinhaber License Holder QBEST INC.Fertigungsstätte Manufacturing Plant Ultra Level Tech. Co., 4F. No.2, Lane 235, Bau 	Ltd. u-Chiau Road aipei City
Prüfzeichen Test Mark Bauart geprüft Sicherheit Regelmäßige Produktions- überwachung Www.tuv.com ID 2000000000 Geprüft nach Tested acc. to EN 60950-1:2006+A11+A1+A12	
Zertifiziertes Produkt(Geräteidentifikation)LizenzCertified Product(Product Identification)Licens	zentgelte - Einheit se Fee - Unit
<u>Einbau-Schaltnetzteil</u> (Switching Power Supply)	
Bezeichnung : PRL1201x-y (RL) (Type Designation) x steht für (stands for) : D oder (or) freibleibend (blank) y steht für (stands for) : 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 oder (or) 1224 Nennspannung (Rated Voltage): AC 100-240V, 47-63Hz Nennstrom (Rated Current) : 6A MAX Ausgang : siehe Aufbau-Übersicht (Output) (see constructional dataform) max. Umgebungstemperatur (max. Ambient Temperature): 50°C Schutzklasse (Protection Class) : I Verschmutzungsgrad (Pollution Degree) : 2 Vermerke : Primär-und Sekundärkreise sind gemäß Verfahren 1 und 2 nach Abschnitt 2.9.4 getrennt. Der Einbau muß gemäß der zugehörigen Einbauanweisung erfolgen. (Remarks : Primary and secondary circuits are separated according to method 1 and 2 of clause 2.9.4. The installation has to be carried out according to the attached installation instruction.)	10
ANLAGE (Appendix): 1 Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen, Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zerifizierten Produktes wird überwacht. This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance. TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg Tel.: (+49/221)8 06 - 13 71 e-mail; cert-validity@de.tuv.com Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety	10 stelle mentorid LGA procession stelle mentorial and LGA procession provide a state of the sta

TÜV Rheinland Group			TÜV Rheinland®			
Report No.	10044276 001	License No.	R 50271904	Appendix No.	1	
Total pages: 13					31-Dec-13	

License Holder:	QBEST INC.			
Address:	1F, NO.15, ALLEY 22, LANE 157, SEC.5, FUU AN ROAD, TAINAN CITY, TAIWAN, R.O.C.			
Factory :	ULTRA LEVEL TECH CO .,LTD.			
Address :	4F, No. 2, Lane 235, Bau-Chiau Road, Hsin-Tien Dist., New Taipel City 231, Taiwan (R.O.C.)			
Type of appliance:	Switching Power Supply			
Type designation:	PRL1201x-y (Trade-mark : (**********)) (x= D or blank, y=05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224) ('x" Denotes output type, blank for single output, "D" for dual output., "y" denotes output voltage)			
Input Rating:	I/P : AC 100-240V, 47-63Hz, 6A			
Protection Class:	Class I			
Ambient temperature:	+50°C			
Supply connection:	Terminal block or AC Connector			
Comments:	Weigh: Approx. 1.2kg			
	Output Rating			
	Model name	Voltage (Vdc)	Max. Current (A)	Max. Watts (W)
	PRL1201-05	3-5	60	300
	PRL1201-10	6 – 10	40	400
	PRL1201-12	11 – 13	36.36	400
	PRL1201-15	13.5 - 16	29.62	400
	PRL1201-18	17 – 21	23.52	400
	PRL1201-24	22 – 25	18.18	400
	PRL1201-28	26 - 30	15.38	400
	PRL1201-36	31 – 40	12.90	400
	PRL1201-48	41-50	9.75	400
	PRL1201-54	51-60	7.84	400
	PRL1201D-0512	+5V	35	300
		+12V	16.67	

TÜV Rheinland Group

QBEST INC. December 31, 2013

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(name of authorized person)

Date Name Signature

Date Name

Stamp & Signature of licenseholder



Ref. Certif. No.

JPTUV-054723

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

Product Produit

Name and address of the applicant Nom et adresse du demandeur

Name and address of the manufacturer Nom et adresse du fabricant

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

Ratings and principal characteristics Valeurs nominales et charactéristiques principales

Trademark (if any) Marque de fabrique (si elle existe)

Type of Manufacturer's Testing Laboratories used Type de programme du laboratoire d'essais constructeur

Model / Type Ref. Ref. de type

Additional information (if necessary may also be reported on page 2) Les informations complémentaires (si nécessaire, peuvent être indiqués sur la 2^{ème} page)

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

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 partie de ce Certificat

CERTIFICAT D'ESSAI OC

Switching Power Supply

OBEST INC. 1F, NO. 15, ALLEY 22, LANE 157, SEC. 5, FUU AN ROAD, TAINAN CITY 709 Taiwan

QBEST INC. 1F, NO. 15, ALLEY 22, LANE 157, SEC. 5, FUU AN ROAD, TAINAN CITY 709 Taiwan

Ultra Level Tech. Co., Ltd. 4F. No.2, Lane 235, Bau-Chiau Road Hsin-Tien Dist., New Taipei City, 231 Taiwan

Input : AC 100-240V; 47-63Hz; 6A MAX; Class I Output: refer to the test report

RL

N/A

PRL1201x-y (x = D or blank; y = 05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224)

-Ing

Dipl.

For model differences, refer to the test report.

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

11034934 001

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:

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09.01.2014

Signature:



Test Report issued under the responsibility of:



TEST REPORT IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements

Report Number	11034934 001			
Date of issue	January 2, 2014			
Total number of pages	94			
CB Testing Laboratory	TÜV Rheinland Taiwan Ltd., Taichung Laboratory			
Address	No. 9, Ln. 36, Sec. 3, Minsheng Rd., Daya District, Taichung City 428, Taiwan			
Applicant's name	QBEST INC.			
Address	1F, NO.15, ALLEY 22, LANE 157, SEC.5, FUU AN ROAD, TAINAN CITY 709 Taiwan			
Manufacturer's name	Same as applicant.			
Address	Same as applicant.			
Test specification:				
Standard	IEC 60950-1:2005 (Second Edition) + Am 1:2009			
Test procedure	CB Scheme			
Non-standard test method	N/A			
Test Report Form No	IEC60950_1C			
Test Report Form(s) Originator:	SGS Fimko Ltd			
Master TRF	Dated 2012-08			
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If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.				
This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.				
Test item description:	Switching Power Supply			
Trade Mark				
Manufacturer	Same as applicant			
Model/Type reference	PRL1201x-y (x= D or blank, y=05, 10, 12, 15, 18, 24, 28, 36, 48, 54, 0512, 0524 or 1224)			
Ratings	i/p: AC 100-240V, 47-63Hz, 6A MAX			
	o/p: See page 7-8			



CE EMC TEST REPORT

for

Switching Power Supply

Model : PRL1201 series; PRL1201D series

Data Applies To: Shown in annex

Brand Name :



Test Report Number:

T130924N01-E

Issued for

QBEST INC.

No.3, Aly. 22, Ln. 157, Sec. 5, Fu' an Rd., Annan Dist., Tainan City 709, Taiwan (R.O.C.)

Issued By

Compliance Certification Services Inc.

Tainan Laboratory

No.8, Jiucengling, Xinhua Dist., Tainan City 712, Taiwan (R.O.C.)

TEL: 886-6-580-2201

FAX: 886-6-580-2202

Issued Date : November 06, 2013



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1 TEST CERTIFICATION

- **Product:** Switching Power Supply
 - Model: PRL1201 series; PRL1201D series

Data Applies To: Shown in annex

Brand Name:



Applicant: QBEST INC. No.3, Aly. 22, Ln. 157, Sec. 5, Fu' an Rd., Annan Dist., Tainan City 709, Taiwan (R.O.C.) Manufacturer: ULTRA LEVEL TECH. CO., LTD. 4F, No. 2, Lane 235, Bau-Chiau Road, Hsin-Tien Dist., New Taipei City 231, Taiwan (R.O.C.) September 13, 2013 ~ November 06, 2013 Tested: Applicable EN 55022: 2010 EN 55024: 2010 Standards: EN 61000-3-2: 2006+A2: 2009 IEC 61000-4-2: 2008 EN 61000-3-3: 2008 IEC 61000-4-3: 2010 IEC 61000-4-4: 2012 IEC 61000-4-5: 2005 IEC 61000-4-6: 2008 IEC 61000-4-8: 2009

IEC 61000-4-11: 2004

Deviation from Applicable Standard	
None	

The above equipment was tested by Compliance Certification Services Inc. for compliance with the requirements of technical standards specified above under the EMC Directive 2004/108/EC.The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

 Approved by:
 Reviewed by:

 Jeter Wu
 Button

 Assistant Manager
 Eric Huang

Page 4 / 119

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