Certificate Number UL-US-L496569-2113-90408102-6

Report Reference E496569-20180409

Date 25-May-2023

Issued to: Flex Electronics (Shanghai) Co Ltd

33 Fuhua Road, Jiading District Shanghai, Shanghai Shi 201818

China

This is to certify that representative samples of

QQJQ2 - Power Supplies for Use with Audio/Video, Information and Communication Technology Equipment -

Component

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete

in certain constructional features or restricted in

performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: UL 62368-1, 2nd Ed., Issue Date: 2014-12-01

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Deborah Jennings-Conner, VP Regulatory Services

UL LLC





Certificate Number UL-US-L496569-2113-90408102-6

Report Reference E496569-20180409

Date 25-May-2023

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
PKU3913D*, * represents PI or SI may be followed by a	DC-DC Converter
combination of the additional suffixes, see below for	
each suffix.	
All models have suffixes that represent minor differences	
that do not affect safety.	
All models have one of the following suffixes:	
PI - pins for through hole mounting	
SI - pins for surface mounting	
PI or SI may be followed by a combination of the	
following additional suffixes: P - positive remote control (negative remote control is	
standard)	
M - increased stand-off and height	
LA - lead length 3.69 mm (0.145 in.) (5.33 mm (0.210 in.)	
is standard)	
LB - lead length 4.57 mm (0.180 in.) (5.33 mm (0.210 in.)	
is standard)	
LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210	
in.) is standard)	
LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210	
in.) is standard) NB - no base plate(PKB-B models only)	
OP - optional part list	
HS - base plate	
LHS-low base plate	
HV - baseplate with wings	
G - baseplate with ground pin (HV baseplate only)	
OC - custom optimized control loop	
OV - 36-60V input voltage	
OA - 1.5 V output voltage	
OB - 1.2 V output voltage	
LV - latching over voltage protection	
LT - latching over temperature protection	
LI - latching over current protection	
LP - latching over temperature and over voltage	
protection	
LIV - latching over current and over voltage protection	
LIT - latching over current and over temperature	
protection	
LPA - latching over voltage, over temperature and over current protection	
OT - change under voltage at shut down level	
O I Change under voltage at shut down level	



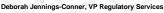


Certificate Number UL-US-L496569-2113-90408102-6

Report Reference E496569-20180409

O - electrical optional part list	
NT – no trim function	DO DO 0
PKU4105C PILA	DC-DC Converter
PKU4110D PIHS	Power Supplies for AV, ITE, and AVICT Equipment
PKU4110D*, * represents PI or SI may be followed by a	Power Supplies for AV, ITE, and AVICT
combination of the additional suffixes, see page 3 for each suffix.	Equipment
All models have suffixes that represent minor differences that do not affect safety.	
All models have one of the following suffixes:	
PI - pins for through hole mounting	
SI - pins for surface mounting	
PI or SI may be followed by a combination of the	
following additional suffixes:	
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M - increased stand-off and height	
LA - lead length 3.69 mm (0.145 in.) (5.33 mm (0.210 in.)	
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is standard)	
LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210	
in.) is standard)	
LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210	
in.) is standard)	
NB - no base plate(PKB-B models only)	
OP - optional part list	
HS - base plate	
LHS-low base plate	
HV - baseplate with wings	
G - baseplate with ground pin (HV baseplate only)	
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OV - 36-60V input voltage	
OA - 1.5 V output voltage	
OB - 1.2 V output voltage	
LV - latching over voltage protection	
LT - latching over temperature protection	
LI - latching over current protection	
LP - latching over temperature and over voltage	
protection	
LIV - latching over current and over voltage protection	
LIT - latching over current and over temperature	
protection	
LPA - latching over voltage, over temperature and over	
current protection	
OT - change under voltage at shut down level	

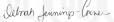




Certificate Number UL-US-L496569-2113-90408102-6

Report Reference E496569-20180409

O - electrical optional part list NT – no trim function	
PKU4111D PIHS	Power Supplies for AV, ITE, and AVICT
PKU4111D PIHSLA	Equipment Power Supplies for AV, ITE, and AVICT
FROATTID FILISEA	Equipment
PKU4111D*	Power Supplies for AV, ITE, and AVICT Equipment
PKU4113D PIHS	Power Supplies for AV, ITE, and AVICT Equipment
PKU4113D PIOLA	Power Supplies for AV, ITE, and AVICT Equipment
PKU4113D*, * represents PI or SI may be followed by a combination of the additional suffixes, see page 3 for each suffix. All models have suffixes that represent minor differences that do not affect safety. All models have one of the following suffixes: PI - pins for through hole mounting SI - pins for surface mounting PI or SI may be followed by a combination of the following additional suffixes: P - positive remote control (negative remote control is standard) M - increased stand-off and height LA - lead length 3.69 mm (0.145 in.) (5.33 mm (0.210 in.) is standard) LB - lead length 4.57 mm (0.180 in.) (5.33 mm (0.210 in.) is standard) LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210 in.) is standard) LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210 in.) is standard) NB - no base plate(PKB-B models only) OP - optional part list HS - base plate LHS-low base plate LHS-low base plate HV - baseplate with wings G - baseplate with ground pin (HV baseplate only) OC - custom optimized control loop	Power Supplies for AV, ITE, and AVICT Equipment
OV - 36-60V input voltage OA - 1.5 V output voltage	
OB - 1.2 V output voltage LV - latching over voltage protection	
LT - latching over temperature protection LI - latching over current protection	





Certificate Number UL-US-L496569-2113-90408102-6

Report Reference E496569-20180409

Date 25-May-2023

	/ / /
LV - latching over voltage protection	
OB - 1.2 V output voltage	
OA - 1.5 V output voltage	
OV - 36-60V input voltage	
OC - custom optimized control loop	
G - baseplate with ground pin (HV baseplate only)	
HV - baseplate with wings	
LHS-low base plate	
HS - base plate	
OP - optional part list	
NB - no base plate(PKB-B models only)	
in.) is standard)	
LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210	
in.) is standard)	
LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210	
is standard)	
LB - lead length 4.57 mm (0.180 in.) (5.33 mm (0.210 in.)	
is standard)	
LA - lead length 3.69 mm (0.145 in.) (5.33 mm (0.210 in.)	
M - increased stand-off and height	
standard)	
P - positive remote control (negative remote control is	
following additional suffixes:	
PI or SI may be followed by a combination of the	
SI - pins for surface mounting	
PI - pins for through hole mounting	
All models have one of the following suffixes:	
that do not affect safety.	
All models have suffixes that represent minor differences	
each suffix.	
combination of the additional suffixes, see page 3 for	Equipment
PKU4213D*, * represents PI or SI may be followed by a	Power Supplies for AV, ITE, and AVICT
	Equipment
PKU4213D PIHS	Power Supplies for AV, ITE, and AVICT
each suffix.	
a combination of the additional suffixes, see page 3 for	
PKU4116HD*, * represents PI or SI may be followed by	DC-DC Converter
NT – no trim function	
O - electrical optional part list	
OT - change under voltage at shut down level	
current protection	
LPA - latching over voltage, over temperature and over	
protection	
LIT - latching over current and over temperature	
LIV - latching over current and over voltage protection	
protection	

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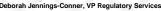
Deborah Jennings-Conner, VP Regulatory Services

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LT - latching over temperature protection	
LI - latching over current protection	
LP - latching over temperature and over voltage	
protection	
LIV - latching over current and over voltage protection	
LIT - latching over current and over temperature	
protection	
LPA - latching over voltage, over temperature and over	
current protection	
OT - change under voltage at shut down level	
O - electrical optional part list	
NT – no trim function	
PKU4217D PIHS	Power Supplies for AV, ITE, and AVICT
FR04217D FII13	
	Equipment
PKU4217D*	Power Supplies for AV, ITE, and AVICT
	Equipment
PKU4317D*, * represents PI or SI may be followed by a	DC-DC Converter
combination of the additional suffixes	
PKU4913D*, * represents PI or SI may be followed by a	Power Supplies for AV, ITE, and AVICT
combination of the additional suffixes, see below for	Equipment
each suffix.	Equipment
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LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210	
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LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210	
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NB - no base plate(PKB-B models only)	
OP - optional part list	
HS - base plate	
LHS-low base plate	
HV - baseplate with wings	
G - baseplate with ground pin (HV baseplate only)	
OC - custom optimized control loop	
OV - 36-60V input voltage	
1 0	/II. \





Certificate Number UL-US-L496569-2113-90408102-6

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OA - 1.5 V output voltage

OB - 1.2 V output voltage

LV - latching over voltage protection

LT - latching over temperature protection

LI - latching over current protection

LP - latching over temperature and over voltage protection

LIV - latching over current and over voltage protection

LIT - latching over current and over temperature

protection

LPA - latching over voltage, over temperature and over current protection

OT - change under voltage at shut down level

O - electrical optional part list NT – no trim function

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Certificate Number UL-CA-2120649-5

Report Reference E496569-20180409

Date 25-May-2023

Issued to: Flex Electronics (Shanghai) Co Ltd

33 Fuhua Road, Jiading District Shanghai, Shanghai Shi 201818

China

This is to certify that representative samples of

QQJQ8 - Power Supplies for Use with Audio/Video, Information and Communication Technology Equipment

Certified for Canada - Component

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional factures or restricted in

in certain constructional features or restricted in

performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

Standard(s) for Safety: CSA C22.2 No. 62368-1-14, 2nd Ed., Issue Date: 2014-12-

01

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information

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Look for the UL Recognized Component Mark on the product.

Deborah Jennings-Conner, VP Regulatory Services

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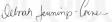
Certificate Number UL-CA-2120649-5

Report Reference E496569-20180409

Date 25-May-2023

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
PKU3913D*, * represents PI or SI may be followed by a	DC-DC Converter
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LT - latching over temperature protection	
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LP - latching over temperature and over voltage	
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LIV - latching over current and over voltage protection	
LIT - latching over current and over temperature	
protection	
LPA - latching over voltage, over temperature and over	
current protection	
OT - change under voltage at shut down level	

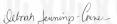


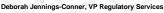


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Report Reference E496569-20180409

O - electrical optional part list	
NT – no trim function	DO DO O
n. Vn. Vn. Vn. Vn. Vn. Vn. Vn	Equipment
PKU4110D PIHS PKU4110D*, * represents PI or SI may be followed by a combination of the additional suffixes, see page 3 for each suffix. All models have suffixes that represent minor differences that do not affect safety. All models have one of the following suffixes: PI - pins for through hole mounting SI - pins for surface mounting PI or SI may be followed by a combination of the following additional suffixes: P - positive remote control (negative remote control is standard) M - increased stand-off and height A - lead length 3.69 mm (0.145 in.) (5.33 mm (0.210 in.) is standard) B - lead length 4.57 mm (0.180 in.) (5.33 mm (0.210 in.) is standard) LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210 in.) is standard) LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210 in.) is standard) NB - no base plate(PKB-B models only) OP - optional part list HS - base plate LHS-low base plate LHS-low base plate HV - baseplate with wings G - baseplate with ground pin (HV baseplate only) OC - custom optimized control loop OV - 36-60V input voltage OA - 1.5 V output voltage OB - 1.2 V output voltage LV - latching over temperature protection LT - latching over temperature protection LI - latching over temperature and over voltage	DC-DC Converter Power Supplies for AV, ITE, and AVICT Equipment Power Supplies for AV, ITE, and AVICT Equipment Equipment
protection LIV - latching over current and over voltage protection	
LIT - latching over current and over temperature protection LPA - latching over voltage, over temperature and over current protection	
OT - change under voltage at shut down level	< × × ×





 Certificate Number
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 Report Reference
 E496569-20180409

O - electrical optional part list NT – no trim function	
PKU4111D PIHS	Power Supplies for AV, ITE, and AVICT Equipment
PKU4111D PIHSLA	Power Supplies for AV, ITE, and AVICT Equipment
PKU4111D*	Power Supplies for AV, ITE, and AVICT Equipment
PKU4113D PIHS	Power Supplies for AV, ITE, and AVICT Equipment
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OA - 1.5 V output voltage OB - 1.2 V output voltage LV - latching over voltage protection LT - latching over temperature protection	





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Report Reference E496569-20180409

Date 25-May-2023

LV - latching over voltage protection	
OA - 1.5 V output voltage OB - 1.2 V output voltage	
OC - custom optimized control loop OV - 36-60V input voltage	
G - baseplate with ground pin (HV baseplate only)	
HV - baseplate with wings	
LHS-low base plate	
OP - optional part list HS - base plate	
NB - no base plate(PKB-B models only)	
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PKU4213D*, * represents PI or SI may be followed by a	Power Supplies for AV, ITE, and AVICT
PKU4213D PIHS	Power Supplies for AV, ITE, and AVICT Equipment
each suffix.	Davier Cumpling for AV LTC and AV CT
a combination of the additional suffixes, see page 3 for	1. VII. VII. VII. VII. V
PKU4116HD*, * represents PI or SI may be followed by	DC-DC Converter
O - electrical optional part list NT – no trim function	
OT - change under voltage at shut down level	
current protection	
LPA - latching over voltage, over temperature and over	
LIT - latching over current and over temperature protection	
LIV - latching over current and over voltage protection	
LP - latching over temperature and over voltage protection	

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LT - latching over temperature protection LI - latching over current protection LP - latching over temperature and over voltage protection LIV - latching over current and over voltage protection LIT - latching over current and over temperature protection
LI - latching over current protection LP - latching over temperature and over voltage protection LIV - latching over current and over voltage protection LIT - latching over current and over temperature
LP - latching over temperature and over voltage protection LIV - latching over current and over voltage protection LIT - latching over current and over temperature
protection LIV - latching over current and over voltage protection LIT - latching over current and over temperature
LIV - latching over current and over voltage protection LIT - latching over current and over temperature
LIT - latching over current and over temperature
protection
Protocuon
LPA - latching over voltage, over temperature and over
current protection
OT - change under voltage at shut down level
O - electrical optional part list
NT – no trim function
PKU4217D PIHS Power Supplies for AV, ITE, and AVICT
Equipment
PKU4217D* Power Supplies for AV, ITE, and AVICT
Equipment Equipment
PKU4317D*, * represents PI or SI may be followed by a DC-DC Converter
combination of the additional suffixes
PKU4913D*, * represents PI or SI may be followed by a Power Supplies for AV, ITE, and AVICT
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HS - base plate
LHS-low base plate
HV - baseplate with wings
G - baseplate with ground pin (HV baseplate only)
OC - custom optimized control loop
OV - 36-60V input voltage

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Deborah Jennings-Conner, VP Regulatory Services

Certificate Number UL-CA-2120649-5 Report Reference E496569-20180409

> **Date** 25-May-2023

OA - 1.5 V output voltage

OB - 1.2 V output voltage

LV - latching over voltage protection

LT - latching over temperature protection

LI - latching over current protection

LP - latching over temperature and over voltage protection

LIV - latching over current and over voltage protection

LIT - latching over current and over temperature

protection

LPA - latching over voltage, over temperature and over current protection

OT - change under voltage at shut down level O - electrical optional part list

NT - no trim function

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Deborah Jennings-Conner, VP Regulatory Services

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