

DK-80226-M1-UL

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME					
CB TEST CERTIFICATE					
Product	DC-DC Converter				
Name and address of the applicant	Flex Electronics (Shanghai) Co., Ltd 33 Fuhua Road, Jiading District, Shanghai, 201818 China				
Name and address of the manufacturer	Flex Electronics (Shanghai) Co., Ltd 33 Fuhua Road, Jiading District, Shanghai, 201818 China				
Name and address of the factory	Flex Electronics (Shanghai) Co., Ltd 33 Fuhua Road, Jiading District, Shanghai, 201818 China				
Note: When more than one factory, please report on page 2	□ Additional Information on page 2				
Ratings and principal characteristics	(optional) BMR481: Vin=40-60Vdc, lin=2.36A; Vout=0.5-1.35Vdc, lout=0-70A BMR482: Vin=40-60Vdc, lin=3.38A; Vout=0.5-1.35Vdc, lout=0-110A See test report for details □ Additional Information on page 2				
Trademark (if any)	flex				
Customer's Testing Facility (CTF) Stage used	CTF Stage 2				
Model / Type Ref.	BMR481 0021/002 (MAIN), BMR481 0022 (SATELLITE), BMR481X1X2X3X4/X5X6X7, BMR482 0001/004 (MAIN) BMR482 0002 (SATELLITE), BMR482X1X2X3X4/X5X6X7				
	Additional Information on page 2 and 3				
Additional information (if necessary may also be	The report was revised to include technical modifications.				
reported on page 2)	Additional Information on page 3				
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014				
As shown in the Test Report Ref. No. which forms part of this Certificate	OFF-4788662006-A-1-M-1 issued on 2021-06-30				
This CB Test Certificate is issued by the Nation	This CB Test Certificate is issued by the National Certification Body				
	□ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA 図 UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK □ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN □ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA				
	For full legal entity names see <u>www.ul.com/ncbnames</u>				
Date: 2021-06-30 Original Issue Date: 2019-01-23	Signature: Jan-Erik Storgaard				

Ref. Certif. No.



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Additional Model(s):	
Series: BMR481X1X2X3X4/X5X6X7 is the generic	series model number, it represents:
X1: Mechanical pin option	
0: LGA(main); Box pin (satellite), L	GA (base board), LGA (controller)
1~9: TBD	
X2X3: additional variants	
00: For Internal use	A Vediust range can be act from 1.2 - 2.11/ Trafe 6.1.40.60//in VD12/SV/D
01: Optimized for Voul 1.8V, foul 60	JA, vadjust range can be set from 1.2 – 2.1V, Traio 6.1, 40-60Vin, VR13/SVID,
02: Optimized for Vout 1 0V Jout 70	t digital isolator
(but SVID configured) 1500V/dc fun	ctional isolation without digital isolator
	Cional isolation without digital isolator
X4: Function option	
0: For internal use only	
1: open frame (for Main)	
2: open frame (for satellite)	
3: open frame (for controller produc	t)
4~8: TBD	
9: for internal use only	
X5X6X7: sequence number for CDA files	
X5, X6, X7 can be a number betwee	en 000 and 999. Both general numbers specified in the datasheet and customer
unique numbers exists.	
Standard CDA should be used start from /001	
BMR482X1X2X3X4/X5X6X7:	
X1 defines the Mechanical pin option	
Option X1 Comment	
Standard, Open frame 0 Main: LGA	
Satellite: Box pir	
Base board: LG/	<i>H</i>
Controller: LGA	
For Main and Satellite products, and Cell compone	ents (X2, X3)
X2X3 is used as sequence number for additional v	ariants
X2X3 can be a number between 00 and 99	
Additional information (if nocossary)	
Additional information (if necessary)	
\sim	UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
/11. \	図 UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK □ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chivoda-ku, Tokvo 100-0005, JAPAN
	□ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA
	For full legal entity names see <u>www.ul.com/ncbnames</u>
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Date: 2021-06-30	Signature: ^{<i>U</i>} <i>U</i>
Original Issue Date: 2019-01-23	Jan-Erik Storgaard
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Additional product set variants	X2X3
Optimized for Vout 0.75V, lout 100A, Vadjust range can be set from 0.5 – 1.35V, Trafo 10:1, 40-60Vin, 1500Vdc functional isolation without digital isolator	00
Optimized for Vout 1.8V, Iout 100A, 40-60Vin, 8:1 transformer ratio, VR13/SVID, 110 W Test Plan, 1500Vdc functional isolation without digital isolator	50
Optimized for Vout 1.8V, Iout 100A, 54V +/- 10%, 6:1 transformer ratio, VR13/SVID, 110 W Test Plan, 1500Vdc functional isolation without digital isolator	51
TBD	01-49 53-99

For Base board components and Controller products (X2, X3) X2X3 is used as sequence number for additional variants X2X3 can be a number between 00 and 99

Additional product set variants	X2X3		
For internal use	00		
Compatible with the following Cell components: BMR	01		
482 0000 BMR 482 0500 and BMR 482 0510			
TBD	02-99		

Function (X4)

X4 defines the Functionality option

Option	X4	Comment
Component	0	For internal use only.
		Example: Used for a Cell component used
		as a part of a Main product
Main product	1	Open Frame
Satellite product	2	Open Frame
Controller product	3	Open Frame
TBD	4-8	
Base board component	9	For internal use only.
		Example: Used for a Base board
		component used as a part of a Main
		product

X5, X6, X7 can be a number between 000 and 999. Both general numbers specified in the datasheet and customer unique numbers exists.

Additionally evaluated to:

EN 62368-1:2014/A11:2017, EN 62368-1:2014 National Differences specified in the CB Test Report.

Summary of Modifications:

- Add models.

- Upgrade CTF stage.

Additional information (if necessary)



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Signature: *U* Jan-Erik Storgaard