



# BD57020MWV-EVK-002

## BOM

July, 2017  
Wireless Power Transfer Group



**BD57020Evaluation Board : Parts List**

Tx Type: MP A7

Parts Name	Part		Unit	Rate	Maker	Number	Size/Package
<b>Tx Coil</b>							
760 308 110	LTX	24	uH	-	Wurth	1	-
<b>IC</b>							
BD57020MWV	U1		-	-	ROHM	1	UQFN040V5050
ML610Q772	U2		-	-	LAPIS	1	VQFP32
BU7241G	U3		-	-	ROHM	1	SSOP5
INA199A1	U4		-	-	TI	1	DCT
NX3225GA	OSC	32	MHz	-	NDK	1	3225
<b>FET/Tr</b>							
RQ3E100GN	MOS_H2, MOS_L2	10	A	30VDSS	ROHM	2	HSMT8
RQ3E100GN	MOS_H1, MOS_L1, M7	10	A	30VDSS	ROHM	3	HSMT8
RQ1E070RP	M1	-7	A	-30VDSS	ROHM	1	TSMT8
RE1C002UN	M2, M4, M6, M8, M10	0.2	A	20VDSS	ROHM	5	EMT3
RUR020N02	M3, M5, M9	2	A	20VDSS	ROHM	3	TSMT3
<b>Diode/LED</b>							
EDZVT2R6.8B	DVQ	6.8	V	5mA	ROHM	1	EMD2
EDZVT2R6.2B	DTVIN	6.2	V	5mA	ROHM	1	EMD2
SML-P11MT	LED1, LED2, LED4	VF<2.0V	-	-	ROHM	3	1006
SML-P11VT	LED3	VF<2.0V	-	-	ROHM	1	1006
RB530VM-30	DCOIL	0.45	V	100mA	ROHM	1	UMD2
EDZVT2R4.3B	DCLMP	4.3	V	5mA	ROHM	1	EMD2
<b>Coil/Trans</b>							
DLW5BTN101SQ2L	COM_CH			6000mA	MURATA	-	5050
<b>Capacitor</b>							
	CADP1	0.1	uF	50V	MURATA	1	1608
	CADP2	10	uF	50V	MURATA	1	3225
	CADP3	10	uF	50V	MURATA	1	3225
	CADP4	22	uF	25V	MURATA	1	2012
GRM32D7U2E333JW31	CS1	0.033	uF	250V	MURATA	1	3225
GRM32D7U2E333JW31	CS2	0.033	uF	250V	MURATA	1	3225
GRM32D7U2E333JW31	CS3	0.033	uF	250V	MURATA	1	3225
	CBOOT1, CBOOT2	0.22	uF	50V	MURATA	2	1608
	CDC1, CDC2	10	uF	10V	MURATA	2	1608
	CVIN1	1	uF	10V	MURATA	1	1608
	CQOUT1	47	uF	10V	MURATA	1	2012
	CQOUT2	1	uF	10V	MURATA	1	1608
	CPA	0.01	uF	10V	MURATA	1	1608
GRM21A7U2E102JW31	CCOILV	1000	pF	250V	MURATA	1	2012
	CCLMP	-	uF	-	-	OPEN	-
	COSC1, COSC2	-	uF	-	-	OPEN	-
	CV33B	1	uF	10V	MURATA	1	1608
	CV33A	1	uF	10V	MURATA	1	1608
	CSCL	10	pF	10V	MURATA	1	1608
	CSDA	-	uF	-	-	OPEN	-
	CPA2	0.01	uF	10V	MURATA	1	1608
	CSIN	0.1	uF	50V	MURATA	1	1608
	CSOUT	-	uF	-	-	OPEN	-
	CAIN0	0.1	uF	10V	MURATA	1	1608
	CAIN1	0.01	uF	10V	MURATA	1	1608
	C2	1	uF	10V	MURATA	1	1608
	C4	4700	pF	10V	MURATA	1	1608
	C8	2200	pF	10V	MURATA	1	1608
	CCOILV2	1000	pF	250V	MURATA	1	2012
	CADC	10000	pF	10V	MURATA	1	1608
	CAIN2	0.01	uF	10V	MURATA	1	1608

Resistor							
UCR18PVHXFLR100	RS1, RS2	100	mΩ		ROHM	2	3225
MCR03EZPF200	RH1, RH2	20	Ω		ROHM	2	1608
MCR03EZPF205	RHD1, RHD2	2	MΩ		ROHM	2	1608
MCR03EZPF200	RL1, RL2	20	Ω		ROHM	2	1608
-	RLD1, RLD2	-	Ω		-	OPEN	-
MCR03EZPJ104	RTVIN	100	kΩ		ROHM	1	1608
MCR18EZPJ681	RVIN1, RVIN2, RVIN3	680	Ω		ROHM	3	2012
MCR03EZPJ104	RPPH	100	kΩ		ROHM	1	1608
MCR03EZPJ104	RPPG	100	kΩ		ROHM	1	1608
MCR03EZPJ104	RPPEN	100	kΩ		ROHM	1	1608
MCR03EZPJ104	RTVQ	100	kΩ		ROHM	1	1608
MCR18EZPJ470	RVQ1, RVQ2	47	Ω		ROHM	2	3225
MCR03EZPJ104	RQPD	100	kΩ		ROHM	1	1608
MCR18EZPJ120	RQIN1, RQIN2	12	Ω		ROHM	2	3225
MCR03EZPJ202	RQOUT1	2	kΩ		ROHM	1	1608
MCR03EZPJ204	RQOUT2	200	kΩ		ROHM	1	1608
MCR03EZPJ103	RGPU	10	kΩ		ROHM	1	1608
MCR03EZPJ104	RGPD	100	kΩ		ROHM	1	1608
MCR03EZPJ102	RDCH	1	kΩ		ROHM	1	1608
MCR03EZPFX103	RREFH	100	kΩ		ROHM	1	1608
MCR03EZPFX1004	RREFL1	1	MΩ		ROHM	1	1608
MCR03EZPFX4701	RREFL2	4.7	kΩ		ROHM	1	1608
MCR10EZPF3302	RVDH	33	kΩ		ROHM	1	2012
MCR03EZPFX6201	RVDL	6.2	kΩ		ROHM	1	1608
MCR03EZPFX6201	RVDL2	6.2	kΩ		ROHM	1	1608
-	RCLMP	-	kΩ		-	OPEN	-
MCR03EZPJ105	RTCXOUT	1	MΩ		ROHM	1	1608
-	ROSC	-	kΩ		-	SHORT	-
MCR03EZPJ152	RSCL	1.5	kΩ		ROHM	1	1608
MCR03EZPJ332	RSDA	3.3	kΩ		ROHM	1	1608
MCR03EZPF1R00	RSIN-	1	Ω		ROHM	1	1608
MCR03EZPF1R00	RSIN+	1	Ω		ROHM	1	1608
MCR03EZPFX1001	RSOUT	1	kΩ		ROHM	1	1608
MCR03EZPFX1501	RLED1, RLED2, RLED3	1.5	kΩ		ROHM	3	1608
MCR03EZPJ302	RLED4	3	kΩ		ROHM	1	1608
MCR03EZPJ363	R8	36	kΩ		ROHM	1	1608
MCR10EZPF3302	RCOILH	33	kΩ		ROHM	1	2012
MCR03EZPFX2701	RCOILL	2.7	kΩ		ROHM	1	1608
MCR03EZPFX3302	RADC	33	kΩ		ROHM	1	1608
	RCOILL2	-	kΩ		-	OPEN	-
Total						103	

# Precautions

We provide the customers with the evaluation board on the following terms and conditions.

By using the evaluation board, you shall be deemed to have agreed the following terms and conditions. If you do not agree with the following terms and conditions, please return us the evaluation board within 30 days after your receipt.

## 1. Restriction on purpose of use and method of use

- The purposes of the evaluation board are technical development, demonstration and evaluation only. The evaluation board is not a final finished product suitable for use by general consumers. Therefore, please do not use the whole or a part of the evaluation board as a final finished product.
- Only professionals who are familiar with the risk related to the handling of electromechanical components shall use the evaluation board only for the purpose of technical development, demonstration and evaluation.

## 2. Our responsibility

- If the evaluation board fails to correspond with the specification prescribed in our “Precautions”, Operating Manual, Application Note, Data Sheet or other documents (collectively “Related Documents”), we will exchange such evaluation board if it is returned within 30 days after your receipt.
- We make no warranties with respect to the evaluation board, expressed or implied, including reliability assurance, merchantability or fitness for a particular purpose.

## 3. Disclaimer

- We shall not be responsible for any application support, your product design and/or software performance.
- We shall not be liable for any and all damage that may be incurred to you due to the use or non-usability of the evaluation board, or any error in the statement of the Related Documents.
- We shall not be liable for any claim, damage, loss, liability or obligation arising in connection with the use of the evaluation board not in accordance with the Related Documents.

## 4. Intellectual property right

- We make no warranties that the evaluation board does not infringe any third party patent right or any other right.
- We do not license you or allow you implement or exploit, expressed or implied, our intellectual property right or any other right with respect to the evaluation board and the information stated in the Related Documents.

## 5. Your responsibility

- Please understand from (1) to (3) of the below and give representation and consent:
  - (1)• that you have knowledge of laws and regulatory rules applicable to the evaluation, test or any other use of your products and the evaluation board;
  - (2)• that your products are safe, and that you are responsible for assurance of the your products' compliance with laws and regulatory rules;

- that you are responsible for the safety of act of yourself, your employees, affiliates, contractors and/or designers who use the evaluation board;
  - that you properly isolate the interface between the evaluation board and a human body in order to minimize the risk of electric shock.
- (3)▪ that as the evaluation board is not a final finished product, which may not conform with the safety standards (UL, CSA, VDE, CE, RoHS, WEE, etc.), you shall judge on your own responsibility whether the evaluation board comply with such standards and related certifications.
- that you take preventive measures to prevent any occurrence such as property damage, injury or death even in the event that the evaluation board does not function as prescribed in the Related Documents or as expected.
  - Before you handle this evaluation board, please read the Related Documents, especially the “Precautions”.
  - If you use the evaluation board for use for any product that shall place top priority in safety such that any defect of the evaluation board may cause serious injury or death, please notify us of such intention, and if we request, please execute contracts for guarantee and indemnity separately.
  - Please do not disassemble, alter, or change the evaluation board.
  - Please do not resell the evaluation board.
  - After completing evaluation, please return us the evaluation board, or destruct or dispose of the evaluation board on your responsibility.

End

