

[HBLLC-TSB-001] BOM

[Main Board]

Part Reference	Description	Part Number	Manufacture	Qty.
C1	CAP Electrolytic 390µF ±20% 450V Φ30x30mm SMT	450MXT390MEFCSN30X30	Rubycon	1
C2,C3	CAP Film 0.12µF ±5% 630V Class - SMT	B32672Z6124J	TDK	2
C4	CAP CER 220pF ±5% 630Vdc U2J 3216 SMD	GRM31A7U2J221J	Murata	1
C5,C6,C7,C8	CAP Electrolytic 2200µF ±20% 16V Φ10×20mm SMT	RNL1C222MDS1	Nichicon	4
C9,C10	CAP CER 1µF ±10% 50Vdc X7R 3216 SMD	MSASU31LSB7105KTNA01	Taiyo Yuden	2
CN1	CONNECTOR 2pin 250V AC Inlet C14	6100-4	schurter	1
CN2,CN3	CONNECTOR 1pin -V -mm pitch SMT	7471287	Würth	2
CN4	CONNECTOR 1pin -V -mm pitch SMD	9775046360R	Würth	4
D1,D2	DIODE SHOTTKY BARRIER 40V 1A VF:0.52V PMDU SMD	RBR1MM40A	ROHM	2
L1	COIL 24µH±10% 25mΩ 7A 28x20.3mm x 28.6mm SMD	750345792	Würth	1
LED1	LED RED 20mA VF 2.2V SMD	SML-H12U8TT86	ROHM	1
LED2	LED Green 20mA VF 2.2V SMD	SML-H12M8T	ROHM	1
PC1,PC2	RES 1MΩ J(±5%) 3216 0.25W 500V SMD	TCLT1008	ROHM	2
R1,R2	RES 1MΩ J(±5%) 3216 0.25W 500V SMD	KTR18EZPJ105	ROHM	2
R3	RES 47Ω J(±5%) 3216 0.25W 200V SMD	MCR18EZPJ470	ROHM	1
R4,R6	RES 10Ω J(±5%) 3216 0.5W 200V SMD	ESR18EZPJ100	ROHM	2
R5,R7	RES 3.3Ω J(±5%) 3216 0.5W 200V SMD	ESR18EZPJ3R3	ROHM	2
R8,R9	RES 10kΩ J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ103	ROHM	2
R10	RES 100kΩ FX(±1%) 1608 0.1W 50V SMD	PMR50HZPJ000	ROHM	1
R11,R12	RES 470kΩ F(±1%) 3216 0.25W 500V SMD	KTR18EZPF4703	ROHM	2
R13	RES 2.2kΩ F(±1%) 3216 0.25W 200V SMD	MCR18EZPF2201	ROHM	1
U1	Daughter Board (MOSFET for LLC)	LLCMOS_Rev2504	ROHM/EVK	1
U2	Daughter Board (Controller Circuit for LLC 1.3kW)	LLCCONT_Rev2504_A	ROHM/EVK	1
U3	Daughter Board (SR MOS+Trans, etc for LLC 1.3kW)	SRMOS_Rev2504_B	ROHM/EVK	1
U4	Daughter Board (CCCV Controller Circuit for LLC 1.3kW)	CCCV_Rev2504_A	ROHM/EVK	1
U5	Daughter Board (Auxiliary Power Supply for Server PC)	AUXPS_Rev2510_A	ROHM/EVK	1

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[LLCMOS Board]

Part Reference	Description	Part Number	Manufacture	Qty.
C1,C2	CAP CER 100pF ±5% 630Vdc C0G 3216 SMD	GRM31A5C2J101J	Murata	2
Q1,Q2	TRANSISTOR MOSFET Nch 600V Id:50A 0.0999Ω SMD	R6050WNJ2	ROHM	2

[LLCCONT Board]

Part Reference	Description	Part Number	Manufacture	Qty.
C1	CAP CER 10µF ±10% 50Vdc X7R 3225 SMD	MSASU32MAB7106KPNA01	Taiyo Yuden	1
C2,C12	CAP CER 0.1µF ±20% 100Vdc X7R 1608 SMD	MSASH168SB7104MTNA01	Taiyo Yuden	2
C3,C7,C9	CAP CER 0.22µF ±10% 50Vdc X7R 1608 SMD	MSASU168SB7224KTNB25	Taiyo Yuden	3
C4	CAP CER 4700pF ±20% 100Vdc X7R 1608 SMD	MSASH168SB7472MTNA01	Taiyo Yuden	1
C5	CAP CER 47nF ±20% 100Vdc X7R 1608 SMD	MSASH168SB7473MTNA01	Taiyo Yuden	1
C6,C8	CAP CER 1000pF ±20% 100Vdc X7R 1608 SMD	MSASH168SB7102MTNA01	Taiyo Yuden	2
C10	CAP CER 330pF ±10% 100Vdc undefined 1608 SMD	MSASH168SSD331KTNB01	Taiyo Yuden	1
C11	CAP CER 10nF ±10% 100Vdc X7R 1608 SMD	MSASH168SB7103KTNB01	Taiyo Yuden	1
D1	DIODE SWITCHING 80V 0.1A VF:1.2V UMD2 SMD	1SS355VM	ROHM	1
IC1	IC Resonat controller SMD	L6699D	ST	1
R1	RES 100kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1003	ROHM	1
R2	RES 0Ω J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ000	ROHM	1
R3	RES 8.2kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX8201	ROHM	1
R4	RES 10Ω J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ100	ROHM	1
R5	RES 27kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX2702	ROHM	1
R6	RES 5.6kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX5601	ROHM	1
R7	RES 56Ω FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX56R0	ROHM	1
R8	RES 270kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX2703	ROHM	1
R9	RES 15kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1502	ROHM	1
R10	RES 39Ω FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX39R0	ROHM	1
R11	-	N.C.	-	0
R12	RES 150Ω J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ151	ROHM	1
R13	RES 470kΩ J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ474	ROHM	1
R14	RES 100Ω J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ101	ROHM	1

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[SRMOS Board]

Part Reference	Description	Part Number	Manufacture	Qty.
C1	-	N.C.	-	0
C2	-	N.C.	-	0
C3~C50	CAP CER 10μF ±10% 35Vdc X7R 3216 SMD	C3216X7R1V106	TDK	48
CN17,CN18, CN19,CN20	CONNECTOR 1pin -V -mm pitch SMT	7474966	Würth	4
D1,D2	TVS 40V PMDE SMD	VS40VUA1VWM	ROHM	2
L1,L2	COIL 0.1μH±15% 0.125mΩ 125A φ-mm x 12mm SMD	74431012010	Würth	2
Q1~Q11	TRANSISTOR MOSFET Nch 40V Id:300A 0.00125Ω SMD	RS6G120CH	ROHM	11
R7,R8	RES 100kΩ J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ104	ROHM	2
R9,R10	RES T.B.D 3216 SMD	NON-MCR18	ROHM	2
TR1	TRANSFORMER 16:1 Lm:240μF Lr:2.4μF SMT	750372247	Würth	1

[CCCV Board]

Part Reference	Description	Part Number	Manufacture	Qty.
C1,C2,C5, C9	CAP CER 1μF ±10% 25Vdc X7R 1608 SMD	MSAST168SB7105KTNA01	Taiyo Yuden	4
C3,C8,C11	CAP CER 0.1μF ±20% 100Vdc X7R 1608 SMD	MSASH168SB7104MTNA01	Taiyo Yuden	3
C4,C6	CAP CER 1000pF ±20% 100Vdc X7R 1608 SMD	MSASH168SB7102MTNA01	Taiyo Yuden	2
C7	-	N.C.	-	0
C10	CAP CER 10μF ±20% 25Vdc X7R 3216 SMD	MSAST31LAB7106MTNA01	Taiyo Yuden	1
IC1	IC CCCV Controller - - SO-8 SMD	TSM1014A	ST	1
IC2	IC Current Sense AMP SMD	BD14210G-C	ROHM	1
IC3	IC Synchronous rectification controller for LLC SMD	SRK2001	ST	1
R1	RES 10kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1002	ROHM	1
R2	RES 100kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1003	ROHM	1
R3	RES 15kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1502	ROHM	1
R4,R5	RES 3.3kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX3301	ROHM	2
R6	RES 82kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX8202	ROHM	1
R7	RES 4.3kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX4301	ROHM	1
R8	RES 10kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1002	ROHM	1
R9,R21	RES Ω 1608 W V SMD	NON-MCR03	ROHM	2
R10	RES 47kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX4702	ROHM	1
R11	RES 56Ω FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX56R0	ROHM	1
R12	RES 3.9kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX3901	ROHM	1
R13	RES 6.8kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX6801	ROHM	1
R14	RES 0Ω J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ000	ROHM	1
R15	RES 15kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX1502	ROHM	1
R16	RES 820kΩ FX(±1%) 1608 0.1W 50V SMD	MCR03EZPFX8203	ROHM	1
R17,R18	RES 1Ω J(±5%) 3216 0.5W 200V SMD	ESR18EZPJ1R0	ROHM	2
R19,R20	RES 220Ω J(±5%) 1608 0.1W 50V SMD	MCR03EZPJ221	ROHM	2

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