



UL Recognition Base Material for PCB

Type Designation	Grade	Direct Support	Material	Laminate Maker & UL File Number
1BHB	XPC	YES	R-6710, R6715	Panasonic (E81336)
1HB	XPC	YES	CCP-3000	Chang Chun Plastic (E108591)
1HB	XPC	YES	CCP-3610	Chang Chun Plastic (E108591)
1HB	XPC	YES	DS-1125	Doosan Co. Ltd. (E103670)
1HB	XPC	YES	ETL-XPC-601	Eternal Chemical (E95862)
1AHB	XPC	YES	KB-1150	Kingboard Laminate (E123995)
1AV0	FR-1	YES	DS-1108	Doosan Co. Ltd. (E103670)
1AV0	FR-1	YES	ETL-XPC-207	Eternal Chemical (E95862)
1AV0	FR-1	YES	KB-3151C	Kingboard Laminate (E123995)
1AV0	FR-1	YES	R-8700	Panasonic (E81336)
1SV0	FR-1	YES	KB-3151C	Kingboard Laminate (E123995)
1V0	FR-1	YES	CCP-3400	Chang Chun Plastic (E108591)
1V0	FR-1	YES	CCP-6400	Chang Chun Plastic (E108591)
1V0	FR-1	YES	DS-1107, DS-1107S	Doosan Co. Ltd. (E103670)
1V0	FR-1	YES	DS-1107A	Doosan Co. Ltd. (E103670)
1V0	FR-1	YES	ETL-XPC-204	Eternal Chemical (E95862)
1V0	FR-1	YES	ETL-XPC-207	Eternal Chemical (E95862)
1V0	FR-1	YES	ETL-XPC-801	Eternal Chemical (E95862)
1V0	FR-1	YES	MCL-437F%	Hitachi (E80148)
1V0	FR-1	YES	MCL-432F, MCL-437G	Hitachi (E80148)
1V0	FR-1	YES	KB-3151	Kingboard Laminate (E123995)
1V0	FR-1	YES	KB-3151C	Kingboard Laminate (E123995)
1V0	FR-1	YES	KB-3152	Kingboard Laminate (E123995)
1V0	FR-1	YES	PLC-2147	Sumitomo Bakelite (E95831)
1UAV0	FR-1	YES	CC-3730	Ching Kuang (E80513)
1UAV0	FR-1	YES	DS-1108	Doosan Co. Ltd. (E103670)
1UAV0	FR-1	YES	ETL-XPC-207	Eternal Chemical (E95862)
1UAV0	FR-1	YES	KB-3150	Kingboard Laminate (E123995)
1UAV0	FR-1	YES	R-8700	Panasonic (E81336)
1UV0	FR-1	YES	CCP-3400	Chang Chun Plastic (E108591)
1UV0	FR-1	YES	CCP-6400	Chang Chun Plastic (E108591)
1UV0	FR-1	YES	CC-3710	Ching Kuang (E80513)
1UV0	FR-1	YES	CC-3730	Ching Kuang (E80513)
1UV0	FR-1	YES	DS-1107, DS-1107S	Doosan Co. Ltd. (E103670)
1UV0	FR-1	YES	DS-1107A	Doosan Co. Ltd. (E103670)
1UV0	FR-1	YES	ETL-XPC-204	Eternal Chemical (E95862)
1UV0	FR-1	YES	ETL-XPC-207	Eternal Chemical (E95862)
1UV0	FR-1	YES	ETL-XPC-801	Eternal Chemical (E95862)
1UV0	FR-1	YES	MCL-437FB, MCL-437FX,	Hitachi (E80148)
1UV0	FR-1	YES	MCL-437-FRX, MCL-437-FPEX	Hitachi (E80148)
1UV0	FR-1	YES	MCL-432F, MCL-437G	Hitachi (E80148)
1UV0	FR-1	YES	KB-3151	Kingboard Laminate (E123995)
1UV0	FR-1	YES	PLC-2147	Sumitomo Bakelite (E95831)
3AV0	CEM-1	YES	CCP-508	Chang Chun Plastic (E108591)
3AV0	CEM-1	YES	CCP-518	Chang Chun Plastic (E108591)
3AV0	CEM-1	YES	DS-7106	Doosan Co. Ltd. (E103670)
3AV0	CEM-1	YES	DS-7106A, DS-7106AG	Doosan Co. Ltd. (E103670)
3AV0	CEM-1	YES	S3110	Guangdong Shengyi (E109769)
3AV0	CEM-1	YES	KB-5150	Kingboard Laminate (E123995)
3AV0	CEM-1	YES	CEM-1-87, UV Block CEM-1-87	Nan Ya Plastic (E98983)
3AV0	CEM-1	YES	CEM-1-97, UV Block CEM-1-97	Nan Ya Plastic (E98983)
3AV0	CEM-3	YES	CCP-308	Chang Chun Plastic (E108591)
3AV0	CEM-3	YES	DS-7209	Doosan Co. Ltd. (E103670)
3AV0	CEM-3	YES	DS-7209A	Doosan Co. Ltd. (E103670)
3AV0	CEM-3	YES	S2130	Guangdong Shengyi (E109769)

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3AV0	CEM-3	YES	S2155	Guangdong Shengyi (E109769)
3AV0	CEM-3	YES	MCL-E-637	Hitachi (E80148)
3AV0	CEM-3	YES	KB-7150	Kingboard Laminate (E123995)
3AV0	CEM-3	YES	CEM-3-09	Nan Ya Plastic (E98983)
3AV0	CEM-3	YES	CEM-3-86, UV Block CEM-3-86	Nan Ya Plastic (E98983)
3AV0	CEM-3	YES	CEM-3-92, UV Block CEM-3-92	Nan Ya Plastic (E98983)
3AV0	CEM-3	YES	CEM-3-92PY, CEM-3-10	Nan Ya Plastic (E98983)
3AV0	CEM-3	YES	R-1781, R-1786	Panasonic (E81336)
3AV0	CEM-3	YES	R-1787	Panasonic (E81336)
3AV0	CEM-3	YES	E-568TH, E-668TH	Shin-kobe (E44187)
3AV0	CEM-3	YES	ELC-4970GS	Sumitomo Bakelite (E95831)
3AV0	CEM-3	YES	ELC-4970R&S, ELC-9600	Sumitomo Bakelite (E95831)
3AV0	CEM-3	YES	ELC-4972R&S, ELC-9601, ELC-4973R&S, ELC-9753	Sumitomo Bakelite (E95831)
1BV0	FR-1	YES	DS-1108	Doosan Co. Ltd. (E103670)
1BV0	FR-1	YES	R-8700, R-8705	Panasonic (E81336)
3SAV0	CEM-1	YES	P-121	Pacific Insulating (E115974)
3TAV0	CEM-3	YES	JL-3C	Jiangsu Lianxin (E176891)
3+AV0	CEM-1	YES	JL-1C	Jiangsu Lianxin (E176891)
4AV0	FR-4.1	YES	DS-7402	Doosan Co. Ltd. (E103670)
4AV0	FR-4.1	YES	DS-7402H	Doosan Co. Ltd. (E103670)
4AV0	FR-4.0	YES	DS-7405, DS-7405\$\$	Doosan Co. Ltd. (E103670)
4AV0	FR-4.0	YES	DS-7405A	Doosan Co. Ltd. (E103670)
4AV0	FR-4.0	YES	MCL-E-67#, MCL-E-67	Hitachi (E80148)
4AV0	FR-4.0	YES	LS-4	Jiangsu Lianxin (E176891)
4AV0	FR-4.0	YES	LS-4Y	Jiangsu Lianxin (E176891)
4AV0	FR-4.0	YES	KB-6150	Kingboard Laminate (E123995)
4AV0	FR-4.0	YES	KB-6160, KB-6164	Kingboard Laminate (E123995)
4AV0	FR-4.0	YES	KB-6160C	Kingboard Laminate (E123995)
4AV0	FR-4.0	YES	EEL-145	Kingboard Laminate (E123995)
4AV0	FR-4.0	YES	FR4-97, UV Block FR4-97	Nan Ya Plastic (E98983)
4AV0	FR-4.0	YES	FR-4-11PYR, FR-4-11PYTL	Nan Ya Plastic (E98983)
4AV0	FR-4.0	YES	FR-4-86, FR-4-TL, UV Block FR-4-86	Nan Ya Plastic (E98983)
4AV0	FR-4.1	YES	NPG-R, NPG-170R, NPG-TL, NPG-170TL, NPG-170DR, NPG-170DTL, NPG-170INR, NPG-170INTL, NPG-150DR, NPG-150DTL, NPG-170, NPG-151, NPG-171, NPGN-150LKHD, NPG-150N, NPG-170N	Nan Ya Plastic (E98983)
4AV0	FR-4.1	YES	R-1561, R-1561N, R-1562, R-1562N, R-1566, R-1566N, R-1567, R-1567N, R-1568, R-1568N	Panasonic (E81336)
4AV0	FR-4.0	YES	S1141	Shengyi (E109769)
4AV0	FR-4.0	YES	S1600	Shengyi (E109769)
4AV0	FR-4.0	YES	UP-L, UP-LTC	Uniplus (E165524)
4AV0	FR-4.0	YES	VT-41RD, VT-42RD, VT-45RD	Ventec (E214381)
4HAV0	-	YES	FR-4-98, FR-4-86PY, NP-140TLPY	Nan Ya Plastic (E98983)
2ARHB	XPC	-	KB-1150	Kingboard Laminate (E123995)
2ARV0	FR-1	-	DS-1108	Doosan Co. Ltd. (E103670)
2ARV0	FR-1	-	ETL-XPC-207	Eternal Chemical (E95862)
2BRHB	XPC	-	R-6710, R6715	Panasonic (E81336)
2BRV0	FR-1	-	DS-1108	Doosan Co. Ltd. (E103670)
2BRV0	FR-1	-	R-8700, R-8705	Panasonic (E81336)
2RHB	XPC	-	CCP-3000	Chang Chun Plastic (E108591)
2RHB	XPC	-	DS-1125	Doosan Co. Ltd. (E103670)
2RHB	XPC	-	ETL-XPC-601	Eternal Chemical (E95862)
2RV0	FR-1	-	CCP-3400	Chang Chun Plastic (E108591)
2RV0	FR-1	-	CCP-6400	Chang Chun Plastic (E108591)
2RV0	FR-1	-	DS-1107, DS-1107S	Doosan Co. Ltd. (E103670)

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2RV0	FR-1	-	D-1107A	Doosan Co. Ltd. (E103670)
2RV0	FR-1	-	ETL-XPC-204	Eternal Chemical (E95862)
2RV0	FR-1	-	ETL-XPC-801	Eternal Chemical (E95862)
2RV0	FR-1	-	MCL-437FB, MCL-437FX, MCL-437-FRX, MCL-437-FPEX	Hitachi (E80148)
2RV0	FR-1	-	MCL-432F, MCL-437G	Hitachi (E80148)
2RV0	FR-1	-	KB-3151C	Kingboard Laminate (E123995)
2RV0	FR-1	-	PLC-2147	Sumitomo Bakelite (E95831)
3ARHB	XPC	-	KB-1150	Kingboard Laminate (E123995)
3BRHB	XPC	-	CCP-3000	Chang Chun Plastic (E108591)
3BRHB	XPC	-	DS-1125	Doosan Co. Ltd. (E103670)
3BRHB	XPC	-	ETL-XPC-601	Eternal Chemical (E95862)
3BRHB	XPC	-	R-6710, R6715	Panasonic (E81336)
3BRV0	CEM-1	-	CCP-508	Chang Chun Plastic (E108591)
3BRV0	CEM-1	-	CCP-518	Chang Chun Plastic (E108591)
3BRV0	CEM-1	-	DS-7106	Doosan Co. Ltd. (E103670)
3BRV0	CEM-1	-	KB-5150	Kingboard Laminate (E123995)
3BRV0	CEM-1	-	NS-4791, NS-4796	Nan Ya Plastic (E98983)
3BRV0	CEM-1	-	CEM-1-87, UV Block CEM-1-87	Nan Ya Plastic (E98983)
3BRV0	CEM-1	-	CEM-1-97, UV Block CEM-1-97	Nan Ya Plastic (E98983)
3BRV0	CEM-3	-	CCP-308	Chang Chun Plastic (E108591)
3BRV0	CEM-3	-	DS-7209	Doosan Co. Ltd. (E103670)
3BRV0	CEM-3	-	DS-7209A	Doosan Co. Ltd. (E103670)
3BRV0	CEM-3	-	MCL-E-637	Hitachi (E80148)
3BRV0	CEM-3	-	KB-7150	Kingboard Laminate (E123995)
3BRV0	CEM-3	-	CEM-3-86, UV Block CEM-3-86	Nan Ya Plastic (E98983)
3BRV0	CEM-3	-	CEM-3-92, UV Block CEM-3-92	Nan Ya Plastic (E98983)
3BRV0	CEM-3	-	ELC-4970GS	Sumitomo Bakelite (E95831)
3BRV0	CEM-3	-	ELC-4970R&S, ELC-9600	Sumitomo Bakelite (E95831)
3BRV0	CEM-3	-	ELC-4972R&S, ELC-9601	Sumitomo Bakelite (E95831)
3BRV0	FR-4	-	KB-6150	Kingboard Laminate (E123995)
3RV0	FR-1	-	CCP-3400	Chang Chun Plastic (E108591)
3RV0	FR-1	-	CCP-6400	Chang Chun Plastic (E108591)
3RV0	FR-1	-	DS-1107, DS-1107S	Doosan Co. Ltd. (E103670)
3RV0	FR-1	-	DS-1107A	Doosan Co. Ltd. (E103670)
3RV0	FR-1	-	ETL-XPC-204	Eternal Chemical (E95862)
3RV0	FR-1	-	ETL-XPC-801	Eternal Chemical (E95862)
3RV0	FR-1	-	MCL-437FB, MCL-437FX, MCL-437-FRX, MCL-437-FPEX	Hitachi (E80148)
3RV0	FR-1	-	MCL-432F, MCL-437G	Hitachi (E80148)
3RV0	FR-1	-	PLC-2147	Sumitomo Bakelite (E95831)
3TBRV0	CEM-3	-	JL-3C	Jiangsu Lianxin (E176891)
3+BRV0	CEM-1	-	JL-1C	Jiangsu Lianxin (E176891)
4ARHB	XPC	-	KB-1150	Kingboard Laminate (E123995)
4BRHB	XPC	-	R-6710, R6715	Panasonic (E81336)
4BRV0	FR-4	-	DS-7405, DS-7405\$\$	Doosan Co. Ltd. (E103670)
4BRV0	FR-4	-	DS-7405A	Doosan Co. Ltd. (E103670)
4BRV0	FR-4	-	S1155	Guangdong Shengyi (E109769)
4BRV0	FR-4	-	MCL-E-67, MCL-E-67#	Hitachi (E80148)
4BRV0	FR-4	-	KB-6160, KB-6164	Kingboard Laminate (E123995)
4BRV0	FR-4	-	FR4-97, UV Block FR4-97	Nan Ya Plastic (E98983)
4BRV0	FR-4	-	FR-4-86, FR-4-TL, UV Block FR-4-86	Nan Ya Plastic (E98983)
4BRV0	FR-4	-	NPG-R, NPG-TL, NPG-170R, NPG-170TL	Nan Ya Plastic (E98983)
4RHB	XPC	-	CCP-3000	Chang Chun Plastic (E108591)
4RHB	XPC	-	DS-1125	Doosan Co. Ltd. (E103670)
4RHB	XPC	-	ETL-XPC-601	Eternal Chemical (E95862)
4RV0	FR-1	-	CCP-3400	Chang Chun Plastic (E108591)

Type Designation	Grade	Direct Support	Material	Laminate Maker & UL File Number
4RV0	FR-1	-	CCP-6400	Chang Chun Plastic (E108591)
4RV0	FR-1	-	DS-1107, DS-1107S	Doosan Co. Ltd. (E103670)
4RV0	FR-1	-	DS-1107A	Doosan Co. Ltd. (E103670)
4RV0	FR-1	-	ETL-XPC-204	Eternal Chemical (E95862)
4RV0	FR-1	-	ETL-XPC-801	Eternal Chemical (E95862)
4RV0	FR-1	-	MCL-437FB, MCL-437FX, MCL-437-FRX, MCL-437-FPEX	Hitachi (E80148)
4RV0	FR-1	-	MCL-432F, MCL-437G	Hitachi (E80148)
4RV0	FR-1	-	PLC-2147	Sumitomo Bakelite (E95831)
5ARV0	FR-1	-	DS-1108	Doosan Co. Ltd. (E103670)
5ARV0	FR-1	-	ETL-XPC-207	Eternal Chemical (E95862)
5BRV0	FR-1	-	DS-1108	Doosan Co. Ltd. (E103670)
5BRV0	FR-1	-	R-8700, R-8705	Panasonic (E81336)
6ARV0	FR-1	-	DS-1108	Doosan Co. Ltd. (E103670)
6ARV0	FR-1	-	ETL-XPC-207	Eternal Chemical (E95862)
6BRV0	FR-1	-	DS-1108	Doosan Co. Ltd. (E103670)
6BRV0	FR-1	-	R-8700, R-8705	Panasonic (E81336)
BRV0	FR-2	-	CCP-7400	Chang Chun Plastic (E108591)
BRV0	FR-2	-	CCP-8400	Chang Chun Plastic (E108591)
BRV0	FR-2	-	DS-1202G	Doosan Co. Ltd. (E103670)
T3V0	CEM-1	-	CCP-508	Chang Chun Plastic (E108591)
T3V0	CEM-1	-	DS-7106	Doosan Co. Ltd. (E103670)
T3V0	CEM-1	-	DS-7106A	Doosan Co. Ltd. (E103670)
T3V0	CEM-3	-	CCP-308	Chang Chun Plastic (E108591)
T3V0	CEM-3	-	DS-7209	Doosan Co. Ltd. (E103670)
T3V0	CEM-3	-	DS-7209A	Doosan Co. Ltd. (E103670)
T3V0	CEM-3	-	S2130	Guangdong Shengyi (E109769)
ML1	FR-4.0	YES	DS-7405, DS-7405\$\$	Doosan Co. Ltd. (E103670)
ML2	FR-4.1	YES	DS-7402	Doosan Co. Ltd. (E103670)
ML2	FR-4.0	YES	DS-7408	Doosan Co. Ltd. (E103670)
ML2	FR-4.0	YES	NP-140R, NP-140TL, NP-140MR, NP-140MTL	Nan Ya Plastic (E98983)
ML2	FR-4.1	YES	NPG-R, NPG-TL, NPG-170R, NPG-170TL	Nan Ya Plastic (E98983)
ML2	FR-4.0	YES	R-1761, R-1762, R-1766, R-1767, R-1768	Panasonic (E81336)
ML2	FR-4.1	YES	R-1561, R-1562, R-1566, R-1567, R-1568	Panasonic (E81336)
ML2	FR-4.0	YES	UP-TL, UP-001, UP-001TC	Uniplus (E165524)
ML3	FR-4.0	YES	DS-7409	Doosan Co. Ltd. (E103670)
ML2B	FR-4.0	YES	NP-140TL	Nan Ya Plastic (E98983)
ML2B	FR-4.1	YES	NPG-TL	Nan Ya Plastic (E98983)
ML2B	FR-4.0	YES	R-1766	Panasonic (E81336)
ML2B	FR-4.1	YES	R-1561	Panasonic (E81336)