

Pos.	Qtà	Rif	Descrizione	Value	PN Costruttore	PN Fornitore	Costruttore	Package	PcbFootprint
1	1	BZ1	Cicalino magnetico Tono continuo smd	KTG0905CL		F: 2215094	KINGSTATE	THT	KTG0905CL-KINGSTATE
2	39	C1,C2,C7,C8,C9,C10,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C32,C33,C34,C36,C40,C49,C54,C55,C57,C58,C59,C60,C61,C63,C64	MLCC - SMD/SMT 50V 0.1uF X7R 0603 10%	100nF	C0603C104K8RACTU	M:80-C0603C104K5R	KEMET	SMD0603	SMD0603
3	2	C4,C5	MLCC - SMD/SMT 50V 68pF COG (NP0) 0603 2%	68pF	C0603C680G5GACTU	M:80-C0603C680G5G	KEMET	SMD0603	SMD0603
4	1	C6	COND. ELT. TANTALIO SOLIDO 3528	10uF/25V		M80-C0805C105Z3V	VARI	3528	ETANT-B-R
5	1	C11	COND. ELT. TANTALIO SOLIDO 7343	10uF/50V		M: 74-293D106X9050D2TE3	VISHAY	7343	ETANT-D-R
6	3	C12,C38,C42	MLCC - SMD/SMT 50V 0.01uF X7R 0603 10%	10nF	C0603C104K8RACTU	M:80-C0603C104K5R	KEMET	SMD0603	SMD0603
7	7	C3,C13,C43,C46,C48,C50,C53	MLCC - SMD/SMT 25V 1uF Y5V 0805 10%	1uF		M80-C0805C105Z3V	KEMET	SMD0805	SMD0805-MET
8	2	C35,C39	COND. ELT. ALLUMINIO 35V SMD SIZE D	47uF		M:232-35THV47M6.3X8	VARI	SIZE D	ALUMIN_D
9	2	C37,C41	MLCC - SMD/SMT 35V 0.22uF X7R 1206 10%	220nF		M:80-C1206C224K6R	VARI	SMD1206	SMD1206
10	1	C44	COND. ELT. ALLUMINIO SMD SIZE F	220uF/35V		F: 1870629	VARI	SIZE F	ALUMIN_F
11	1	C45	Cond.Elt.Tantalio 35V SIZE C	22uF/25V	293D226X9035D2TE3	M: 74-293D226X9035D2TE3	VISHAY	TNT SIZE D	ALUMIN_C
12	1	C47	Cond.Elt.Tantalio 35V SIZE C	10uF/35V	293D106X9035D2TE3	M:74-293D106X9035D2TE3	VISHAY	TNT SIZE D	ALUMIN_B
13	2	C51,C52	COND. ELT. TANTALIO SOLIDO 3528	10uF/25V		M:74-293D106X9025B2TE3	VARI	3528	ETANT-B-R
14	1	C56	MLCC X7R, 10V 0805	10uF	C0805C106K8RACTU	KEMET	KEMET	SMD0805	SMD0805-MET
15	1	C62	MLCC X7R, 10V 1206	4u7	VARI	VARI	KEMET	SMD1206	SMD1206
16	2	DL1,DL2	Diodo led smd 0805	LED VERDE		604-AP2012SGD3	KINGBRIGHT	SMD0805	LED0805-MET-12
17	7	DL3,DL4,DL5,DL6,DL7,DL8,DL9	Diodo led smd 0805	GIALLO	KP-2012YD	F-2449812	KINGBRIGHT	SMD0805	LED0805-MET-12
18	1	DL10	Diodo led smd 0805	BLU	KP-2012PBC	F-8529884	KINGBRIGHT	SMD0805	LED0805-MET-12
19	1	D1	ESD Protection compatible with CAN BUS	ESD2CAN24DBZRQ1		M: 595-ESD2CAN24DBZRQ1		SMD	SOT23-123
20	1	D2	Diodo raddrizzatorie Schottky 20V 1A	B120B-13-F		M: 621-B120B-F	DIODES	SMB	SMB
21	17	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14,D15,D16,D17,D18,D19	Fast-speed switching diodes	1N4148WT	1N4148WT	F-2453270	ON	SOD523F	SOD523F1-2
22	1	FLT1	filtro EMI 50V 15A EMI BLK FILT	BNX012-01		M: 81-BNX012-01	MURATA	THT	BNX012-01-MURATA_NEW
23	1	F1	Fusibili a montaggio superficiale 2 AMP	154 002T		M: 576-0154002.DRT	LITTELFUSE	SMD	LITTLEFUSE-154
24	1	J1	Connettore filo scheda verticale P2mm 5 VIE VERT. PTH	B5B-PH-K-S(LF)(SN)		F: 9492445	JST	B5B-PH-K-S(LF)(SN)	B5B-PH-K-JST
25	1	J2	ZIF 20 POS. p 0.5 mm, 0.5A	54548-2071		M: 538-54548-2071	MOLEX	54548-2071	54548-2071-MOLEX
26	1	J3	Connettore filo scheda verticale P2mm 3 VIE THT	TYCO 292161-3		M: 571-292161-3	AMP-TE	292161-3	292161-3-TE
27	1	J4	Connettore filo scheda verticale P2mm 3 VIE VERT. PTH	B3B-PH-K-S(LF)(SN)		F: 9492429	JST	B3B-PH-K-S(LF)(SN)	B3B-PH-K-JST
28	1	J5	Connettore filo scheda verticale P2mm 3 VIE THT	TYCO 292161-3		M: 571-292161-3	AMP-TE	292161-3	B3B-PH-K-JST
29	1	J6	Connettore 8 pin p.1.27mm	TYCO 338068-8		M: 571-338068-8	AMP-TE	THT	TYCO-0-338068-8
30	1	J7	Connettore filo scheda verticale P2mm 3 VIE THT	TYCO 292161-3		M: 571-292161-3	AMP-TE	THT	MOLEX-53253-0370

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31	1	J8	Header boxed IDC dritto 2 X 3 P.2.54	61200621621	61200621621	F-2356251	WURTH	THT	61200621621-WE
32	1	L1	Filtro Modo Comune x CAN BUS	DLW32SH101XF2L	DLW32SH101XF2L	D-490-DLW32SH101XF2LTR-ND	MURATA	DLW32SH101XF2L	DLW32S_MURATA
33	3	L2,L6,L7	Ferrite Bead	BLM18BD102	BLM18BD102SN1D	R-724-1318	MURATA	SMD0603	SMD0603
34	1	L3	Induttore Common mode coil	DLW5BTM102SQ2L	DLW5BTM102SQ2L	R-2470375	MURATA	5B	DLW5BT-MURATA
35	1	L4	Induttore 47uH 30% SMD 1038	47uH		M: 652-SRU1038-470Y	BOURNS	1038	SRU1038
36	1	L5	Induttore 8.2uH	8.2uH	SRR4528A-8R2Y	R-1765964	BOURNS	5X5MM SMD	SRR4528A-BOURNS
37	1	OPTO1	Optoisolatore 100v/2A S.S.R.	CPC1916Y	CPC1916Y	M: 849-CPC1916Y	IXYIS	THT	CPC1706-CLARE
38	6	P1,P2,P3,P4,P5,P6	trimmer multigiri reg alto 3296W-BOURNS	2K		652-3296W-1-202LF	BOURNS	THT	3296W-BOURNS
39	1	Q1	MOSFETs 100V 7.5a .22 Ohms/VGS=1V	FDS3672		M: 512-FDS3672	ONSEMI	SO8	LFPAK-UNIVERSAL
40	21	Q2,Q3,Q4,Q5,Q6,Q7,Q9,Q11,Q12,Q13,Q14,Q15,Q16,Q17,Q18,Q19,Q20,Q21,Q22,Q23,Q24	MOSFET CANALE N	2N7002L	2N7002L	M: 512-2N7002L	ON	SOT23	SOT23-123
41	2	Q8,Q10	MOSFET 60V 1.3A SMD SOT23	ZXMS6004FFTA		522-ZXMS6004FFTA	ZETEX	SOT23	SOT23MO2
42	1	R1	Current Sense Resistors - SMD 1.0W 1% 0.1 Ohm	0R1		M:652-CRM2010FXR100ELF	BOURNS	SMD2010	CRM2010-BOURNS
43	1	R2	Resistore thick film 1/16 W 1% 0603	18K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
44	3	R3,R6,R7	Resistore thick film 1/8 W 1% 0805	2K2		MULTICOMP	VARI	SMD0805	SMD0805-MET
45	24	R4,R5,R22,R24,R26,R29,R30,R34,R40,R42,R44,R47,R48,R50,R55,R58,R60,R62,R65,R66,R68,R74,R133,R152	Resistore thick film 1/16 W 1% 0603	10K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
46	2	R8,R81	Resistore thick film 1/16 W 1% 0603	2K2	VARI	MULTICOMP	VARI	SMD0603	SMD0603
47	18	R9,R23,R35,R43,R51,R59,R67,R69,R76,R78,R80,R82,R83,R86,R88,R90,R92,R151	Resistore thick film 1/16 W 1% 0603	1K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
48	3	R10,R102,R125	Resistore thick film 1/4W 1% 1206	100K	VARI	MULTICOMP	VARI	SMD1206	SMD1206
49	7	R11,R12,R14,R94,R95,R101,R103	Resistore thick film 1/4W 1% 1206	33K	VARI	MULTICOMP	VARI	SMD1206	SMD1206
50	1	R13	Resistore thick film 1/4W 1% 1206	1R3		MULTICOMP	VISHAY	SMD1206	SMD1206
51	1	R15	Resistore thick film 1/16 W 1% 0603	33R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
52	1	R16	Resistore thick film 1/16 W 1% 0603	120R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
53	3	R17,R18,R19	Resistore thick film 1/16 W 1% 0603	470R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
54	5	R20,R31,R32,R38,R56	Resistore thick film 1/16 W 1% 0603	560R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
55	17	R21,R27,R28,R33,R37,R39,R45,R46,R49,R53,R57,R63,R64,R70,R72,R134,R150	Resistore thick film 1/16 W 1% 0603	3K3	VARI	MULTICOMP	VARI	SMD0603	SMD0603
56	6	R25,R36,R41,R52,R61,R71	Resistore thick film 1/16 W 1% 0603	100K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
57	2	R54,R73	Resistore thick film 1/16 W 1% 0603	12K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
58	7	R75,R77,R79,R85,R87,R89,R91	Resistore thick film 1/4W 1% 1206	2K2	VARI	MULTICOMP	VARI	SMD1206	SMD1206
59	7	R84,R119,R120,R121,R128,R129,R154	Resistore thick film 1/16 W 1% 0603	68K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
60	7	R96,R110,R111,R112,R113,R114,R155	Resistore thick film 1/16 W 1% 0603	680R	VARI	MULTICOMP	VARI	SMD0603	SMD0603

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61	3	R97,R98,R99	Resistore thick film 1/4W 1% 1206	330R	VARI	MULTICOMP	VARI	SMD1206	SMD1206
62	1	R100	Resistore thick film 1/4W 1% 1206	10K	VARI	MULTICOMP	VARI	SMD1206	SMD1206
63	1	R104	Resistore thick film 1/8W 1% 0805	100		MULTICOMP	VARI	SMD0805	SMD0805-MET
64	2	R105,R122	Resistore thick film 1/4W 1% 1206	0R0		MULTICOMP	VARI	SMD1206	SMD1206
65	6	R106,R107,R108,R109,R123,R124	0.35A RESETTABLE FUSE	0.35 FUSE		650-NANOSMDC035F-2	TYCO / RAYCHEM	SMD1206	SMD1206
66	12	R115,R116,R117,R126,R127,R130,R143,R144,R145,R146,R147,R148	Resistore thick film 1/16 W 1% 0603	33K	VARI	MULTICOMP	VARI	SMD0603	SMD0603
67	1	R118	Resistore thick film 1/8 W 1% 0805	100		MULTICOMP	VARI	SMD0805	SMD0805-MET
68	2	R131,R136	Resistore thick film 1/16 W 1% 0603	220R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
69	2	R132,R149	Resistore thick film 1/16 W 1% 0603	4K7	VARI	MULTICOMP	VARI	SMD0603	SMD0603
70	2	R135,R139	Resistore thick film 1/16 W 1% 0603	1K2	VARI	MULTICOMP	VARI	SMD0603	SMD0603
71	1	R137	Resistore thick film 1/16 W 1% 0603	680	VARI	MULTICOMP	VARI	SMD0603	SMD0603
72	1	R138	Resistore thick film 1/16 W 1% 0603	370R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
73	1	R140	Resistore thick film 1/16 W 1% 0603	1K7	VARI	MULTICOMP	VARI	SMD0603	SMD0603
74	1	R141	Resistore thick film 1/16 W 1% 0603	1K4	VARI	MULTICOMP	VARI	SMD0603	SMD0603
75	1	R142	Resistore thick film 1/16 W 1% 0603	2K1	VARI	MULTICOMP	VARI	SMD0603	SMD0603
76	1	R153	Resistore thick film 1/16 W 1% 0603	330R	VARI	MULTICOMP	VARI	SMD0603	SMD0603
77	2	R156,R157	Resistore thick film 1/4W 1% 1206	100R	VARI	MULTICOMP	VARI	SMD1206	SMD1206
78	6	SW1,SW2,SW3,SW4,SW5,SW6	Plulsante Tactile smd	DTSM-32S-B		F: 9471898	MULTICOMP	SMD	DTSM-32S-B
79	10	TVS1,TVS2,TVS3,TVS14,TVS15,TVS16,TVS17,TVS18,TVS19,TVS20	Esd monodirezionale	SMBJ30A	SMBJ30A-E3/52	F-9551042	VISHAY	SMB	SMB-12
80	6	TVS4,TVS5,TVS6,TVS7,TVS8,TVS9	Esd monodirezionale	PESD12VS1UL	PESD12VS1UL				
81		NEXPERIA	SOD882	SOD882D-1_2	5V Nominal				
82	4	TVS10,TVS11,TVS12,TVS13	Esd monodirezionale	PESD5V0C1ULS-QYL	PESD5V0C1ULS-QYL		NEXPERIA	SOD882BD	SOD882BD-1_2
83	1	U1	Hot Swap Voltage Controllers Hi Side OR-ing FET Cntlr	LM5060MM/NOPB		926-LM5060MM/NOPB	TEXAS	MSOP-10	DGS0010A-TEXAS
84	1	U3	Driver illuminazione a LED 1.0A CONSTANT CRNT BUCK REG	LM3404MR/NOPB		M: 926-LM3404MR/NOPB	TEXAS	SO-POWERPAD-8	DDA0008B-TEXAS
85	1	U4	CAN TRANSCEIVER	TJA1050T	TJA1050T	M: 771-TJA1050T/CM,118	NXP	SOIC-8	SO8
86	3	U5,U6,U7	Precision Amplifiers AutoCat Advanced Lin CMOS Rail Op Amps	TLC2274AQPWRQ1	TLC2274AQPWRQ1	595-TLC2274AQPWRQ1	TEXAS	TSSOP-14	SOG.65M/14/WG6.6/L5.1
87	8	U2,U8,U9,U10,U11,U12,U13,U14	Optoisolatore singolo	TCMT1103	TCMT1103	F-1328388	VISHAY	HALF PITCH MINI-FLAT	SSOP4
88	2	U15,U16	Rele' stato solido 60Vdc 0.1A	CPC1017N	CPC1017N	M-849-CPC1017N	CLARE	4-PIN SOP	CPC1017N-CLARE
89	1	U17	CIRCUITO INTEGRATO	CD4555BM		595-CD4555BM96	TEXAS	SO14	SOG.050/16/WG.244/L.394
90	2	U18,U19	Driver controllore motore ponte intero	L6205PD		511-L6205PD	ST	POWERSO 20	POWERSO20+FORI
91	1	U20	Regolatori di tensione lineari 3-TERMINAL ADJ REG	LM317S/NOPB		M: 926-LM317S/NOPB	TEXAS	TO263-3	TO-263-3PIN
92	1	U21	REG. TENSIONE 5 V 0.5A	VX78012-500	VX78012-500	M: 490-VX7812-500	CUI	THT	VX78012-500-CUI
93	1	U22	Multiplexer Switch ICs 8-Channel Analog	CD4051BM96	CD4051BQPWRQ1	M: 595-CD4051BM96	TI	SO16	SO16
94	2	U23,U25	Regolatori di tensione lineari 5V 1A Positive	MC7805CD2TG		M: 863-MC7805CD2TG	ONSEMI	TO263-3	D2PAK-REG
95	1	U24	Regolatori di tensione LDO 800-mA 3v3 sott223	LM1117MPX-3.3		M: 926-LM1117MPX-33	TEXAS	SOT223	SOT223-1234

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96	1	U26	32bit ARM 4F 1MB Flash, 256K Ram, 2xCAN-FD	SAME51J20A-A	SAME51J20A-A	556-ATSAME51J20A-AUT	MICROCHIP	TQFP	QUAD.50M/64/WG12.00