

Design File: 7BRSS09_2_Rev.0_PMI161117
 Design Title: YR0TATE-IT-SS09
 Selected Variant: 7BRSS09
 Variant Description: MOTOR CONTROL KIT - YR0TATE-IT-SS09
 Based on RENESAS SYNERGY SS09
 Date: 01.03.2018

BILL OF MATERIAL			
Quantity	Part Name	Description	Component Names
6	OR	RESIST SMD 0603 "0R 1%"	R37, R59, R81, R136, R142, R159
3	0R1 1W 2512	RESIST SMD 2512 "0R1" 1% 200V 100PPM/C	R29, R30, R31
8	1µF 50V	COND. SMD 1µF 50V Y5V 1206 L31F10528FNNE	C12, C16, C28, C30, C55, C60, C66, C78
18	10µF 25V	COND. SMD 10µF 25V X7R (Package 1206)	C21, C22, C23, C26, C31, C32, C33, C56, C57, C62, C64, C104, C108, C111, C123, C125, C128, C132
1	100µF 63V.	COND. SMD ELETR. 100µF 63V 105°C 10x10.5 UUXJ101MNL1G5 Nichicon	C2
1	100K	RESIST SMD 0603 "100K 1%"	R4
51	100nF	COND. SMD 50V 0603 X7R PHY223858619812 "100nF"	C4, C5, C7, C9, C11, C20, C25, C34, C35, C47, C49, C50, C51, C53, C58, C59, C61, C63, C65, C67, C68, C72, C73, C74, C76, C77, C80, C82, C86, C88, C92, C93, C95, C98, C100, C101, C105, C106, C112, C118, C121, C122, C124, C130, C131, C134, C135, C136, C138, C139, C142
1	100NF 200V 1210	C.SMD 100NF 200V 1210 X7R	C3
7	100µF	COND. SMD 50V 0603 X7R WLS0603N101500LT "100µF"	C15, C48, C89, C94, C119, C120, C129
145	100R	RESIST SMD 0603 "100R 1%"	R43, R45, R47, R49, R51, R53, R97, R98, R101, R102, R106, R113, R122, R124
1	100R 1/4W	RESIST SMD 1206 "100R 1/4W 1206"	R120
1	105K	R.SMD 105K 0603 1%	R131
3	10B0260	Schottky, 60 V, 1 A, Singolo, DO-214AA, 2 Pin, 490 mV	D1, D19, D26
35	10K	RESIST SMD 0603 "10K 1%"	C96, C103, R6, R7, R8, R15, R16, R19, R22, R28, R35, R42, R44, R46, R48, R50, R52, R56, R58, R67, R77, R95, R100, R112, R121, R127, R128, R129, R139, R140, R149, R151, R152, R153, R165
3	10nF	COND. SMD 50V 0603 X7R WLS0603B103K500CT "10nF"	C24, C107, C140
5	10R	RESIST SMD 0603 "10R 1%"	R32, R33, R34, R162, R163
20	1K	RESIST SMD 0603 "1K 1%"	R63, R68, R89, R94, R99, R103, R104, R111, R130, R132, R133, R134, R138, R154, R170, R171, R172, R173, R174, R175
3	1K2	RESIST SMD 0603 "1K2 1%"	R110, R116, R117
2	1K8	RESIST SMD 0603 "1K8 1%"	R26, R27
3	1M	RESIST SMD 0603 "1M 1%"	R57, R119, R125
25	1nF	COND. SMD 50V 0603 X7R PHY223858615623 "1nF"	C14, C36, C37, C38, C39, C40, C41, C42, C43, C44, C52, C69, C79, C81, C83, C84, C90, C114, C117, C126, C127, C143, C144, C145, C146
1	2µF 100V.	C.SMD 2µF 100V 1210 X7R	C1
1	2µF 25V	COND. SMD 2µF 25V X7R (Package 1206)	C85, C87, C115
2	220µF 16V	COND. SMD ELETR. 220µF 16V 6.3x8 NIC NACE	C70, C71
1	220R	RESIST SMD 0603 "220R 1%"	R108, R114, R115
1	22K	RESIST SMD 0603 "22K 1%"	R5, R9, R144, R145, R168
1	22nF	C.SMD 22nF 50V 0603 X7R	C113
3	22pF	COND. SMD 50V 0603 X7R WLS0603N220500LT "22pF"	C45, C46, C133
9	22R	RESIST SMD 0603 "22R 1%"	R69, R71, R73, R74, R75, R76, R78, R79, R80
11	2K2	RESIST SMD 0603 "2K2 1%"	R66, R92, R141, R146, R147, R148, R156, R157, R158, R160, R161
1	330K	RESIST SMD 0603 "330K 1%"	R14
1	3K3	RESIST SMD 0603 "3K3 1%"	R88
3	47µF 35V.	COND. SMD ELETR. 47µF 35V 6.3x6.3	C27, C29, C54
1	47µF 50V.	COND. SMD ELETR. 47µF 50V UUX-CR 6.3x8	C6, C8, C10
1	470µF 25V.	COND. SMD ELETR. 470µF 25V 10x10.5 NIC NACE	C17
3	470NF 16V	COND. SMD 16V 0603 X7R WLS0603F474M160CT "470nF"	C75, C99, C137
1	470PF	COND. SMD 25V 0603 COG VJ0603D471K00AJ "470pF"	C19
17	47K	RESIST SMD 0603 "47K 1%"	R25, R41, R54, R55, R61, R62, R64, R65, R83, R84, R85, R86, R87, R90, R91, R93, R118
1	47R	RESIST SMD 0603 "47R 1%"	R1, R2, R3, R17, R20, R23
2	4K7	RESIST SMD 0603 "4K7 1%"	R39, R143
2	4n7F	COND. SMD 50V 0603 X7R "4n7F"	C91, C109
1	56K	RESIST SMD 0603 "56K 1%"	R10
1	56K	RESIST SMD 0603 "56K 1%"	R11, R12, R13, R18, R21, R24
3	580R	RESIST SMD 0603 "580R 1%"	R40, R96, R137
1	68R	R.SMD 68R 0603 1%	R123, R126
1	68R 1W 2512	RESIST SMD 2512 "68R" 1% 200V 200PPM/C	R155
2	68K	RESIST SMD 0603 "68K 1%"	R38, R107
1	820R	RESIST SMD 0603 "820R 1%"	R164
1	82K	RESIST SMD 0603 "82K 1%"	R109
1	ABM8G-25.000MHZ-18-D2Y-T	ABM8G-25.000MHZ-18-D2Y-T - Cristallo 25MHz SMD 3,2mm x 2,5mm 30ppm 18pf 20ppm Serie ABM8G	X1
1	AT24C02C-SSHM	C1.SMD AT24C02C-SSHM E2PROM SO8	U15
6	BAT46W	D.BAT46W 150mA 100V SCHOTTKY SOD-123	D3, D5, D7, D8, D9, D10
15	BAT54S	D.SMD BAT54S 200mA 30V SCHOTTKY SOT-23	D11, D12, D13, D16, D17, D20, D21, D22, D23, D24, D25, D28, D29, D30, D31
1	BAV99	D. SMD SOT-23	D15
1	BAW56	D. SMD SOT-23	D14
1	BC807	TRANS. SMD BC807 SOT-23 PHABC807	Q10
1	BC817	TRANS. SMD BC817 SOT-23 PHABC817	Q8, Q9
1	BERG 2p	CONN. BERGER 40P M.VERT.W51X40/90	P1
6	BERG 3P	CONN. BERGER 40P M.VERT.W51X40/90	J12, J13, J14, J18, PN1, PN2
2	BERG 6P	CONN. BERGER 40P M.VERT.W51X40/90	PN4, PN5
1	BERGER 2M	STRIP 40P M.VERT.W51X40	J8
3	BERGER 3M	STRIP 40P M.VERT.W51X40	J6, J9, J10
1	BERGER 4M	STRIP 40P M.VERT.W51X40	J20
1	BERGER 6M	STRIP 40P M.VERT.W51X40	J7
1	BDX84C15	D. ZENER 15V 350mW SOT-23	D21
3	ES1D	D. SMD SMA, DO-214AC ES1D 1A 200V Tr 35ms	D2, D4, D6
2	Fiducial	Fiducial per montaggio SMT e coll. SPEA	AD, AD01, AD12
1	FLAT 34M DIN41651	CONN. DIN41651 34vie M (Distr. 143-65-398)	U1
1	FT232R	FT232R USB UART C	U20
2	IND. 10µH 0.25A	IND. 10µH 0.25A CM453232-100 BOUR 1.6ohm	L2, L3
1	IND. 744066100	10µH 30% 3.6A Idc Wurth WE-TPC Series	L6
1	IND. 744066330	33µH 30% 2.1A Idc Wurth WE-TPC Series	L1
1	ISL2704EIBZ	ISL2704EIBZ isolated RS-485 Transceiver	U13
1	ISL7382	High and Low-Side Gate Driver IC	U2, U3, U4
1	ISL8560	DC/DC Power Switching Regulator	U11
1	ISL97519A	ISL97519A PWM Step-Up Regulator	U17
1	ISO7221	ISO7221 Dual Channel Digital Isolators	U9
1	JACK DC10A	CONN. JACK SA 2, 1mm DC-10A SA 12VDC (F-224959)	J2
1	KF380D-TR	C1. KF380D-TR 3.3V 0.5A SO8	U19
1	KSZ8018INA	KSZ8018INA 10BASE-T/10BASE-TX PHY RMII	U7
3	LR. 1206	LED SMD ROSSO 1206	DL2, DL3, DL4
1	LV. 1206	LED SMD VE 1206 HSMG-C150 15mcd GREEN	DL1
1	L78M05ABDT-TR	L78M05ABDT-TR IC, REG. TENSIONE +5.0V, 0.5A, -40°C, DPAK, 7805	U5, U18
1	LM317MDT	C1. PSLCM317MDT 0.5A SMD D-PAK	U8
1	LM393M	C1. SMD LM393M	U7
2	MCL1418	D. SMD MICRO-MELF MCL1418	D18, D27
1	P. FUS 5x20	PORTAF. C.S. 5x20 OMEGA C1024	FU51
1	PANDUIT 4M.	CONN. PAND.M. 4V PAVHLS100-4	J15
1	PANDUIT 5M.	CONN. PAND.MAS. PAVHLS100-5	J16
1	PS	PUNTO DI SALDATAURA	PS1, PS2
1	PS. MINISMDCO75F-24	PTC LITTLEFUSE MINISMDCO75F(24-2 (1812)	U12
6	PULS. K5EM13G LFS	K5EM13G LFS - Interruttore Tattile, Non Illuminato, 32 V, 50 mA, 1.5 N, DM	P1, P2, P3, P4, P5, P6
1	R7FS1247X3A01CF	R7FS1247X3A01CF 32-bit ARM® Cortex®-M0+ microcontroller	U16
1	R7FS5097E3A01CFP-AA0	R7FS5097E3A01CFP-AA0 Synergy Microcontrollers S5 Series	U12
1	R45 749910211A	LAN Ethernet Wurth Elektronik, perdita inserzione -1.4dB, 1 porte, 13.5 x 15.88 x 21.84mm	J4
1	R0065409F	MOS. R0065409F LPFAK 60V 30A Rds-45 Sm	Q1, Q2, Q3, Q4, Q5, Q6, Q7
1	SAMTEC 6-F 90"	SW-106-Q2-G-D-R4 2.54mm 12cont 90" Pressa Serie SSW	U1
1	SAURO 2M/P.5.0.	C. SAURO CIM/OP-02 M.POL.02 p.5.0	J3
1	SAURO 3M/P.5.0.	C. SAURO CIM/OP-03 M.POL.03 p.5.0	J1
2	SM6T30CA	TRANSIL SM6T30CA Bidirect. SMD bobina	D22, D23
3	STARPOINT 2PIN	Start Point da 2 connessioni	ASTP1, ASTP2, ASTP3
15	TEST	TESTPOINT	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, TP14, TP15
1	TR1A10521	Galvanically isolated high-speed CAN transceiver	U14
1	TL431CDBZR	PROGRAMMABLE VOLTAGE REFERENCE TL431CDBZR SOT-23-3	U10
1	TRM 05055	C1. DC/DC ISO TRANSFORMERS TRACO-POWER	U11
2	USB MICRO B 90"	MICRO USB JST UB-MCSB83-S0204-45-1-TB NMP tipo B femmina 90" SMT	U19, J21
1	ZY581R5-2PL51T-G01	IND.COMMON ZY581R5-2PL51T-G01 TDK	L4