Designator	Comment	Description	Quantity
C1, C117	10uF	0805	2
C2, C4, C6, C12, C13, C16, C19, C23, C24, C27,			
C30, C34, C35, C38, C41, C45, C46, C49, C52, C56,			
C57, C60, C63, C67, C68, C71, C74, C78, C79, C82,			
C85, C89, C90, C94, C95, C100, C102, C104, C106,			
C107, C108, C109, C110, C111, C112, C113, C114,			
C115, C116	100nF	0603	49
C3, C5, C7, C11, C22, C33, C44, C55, C66, C77,			
C88, C93, C101, C103, C105, C120, C121	1uF	0805	17
C8, C9, C10	10nF	0603	3
C14, C15, C17, C18, C20, C21, C25, C26, C28, C29,			
C31, C32, C36, C37, C39, C40, C42, C43, C47, C48,			
C50, C51, C53, C54, C58, C59, C61, C62, C64, C65,			
C69, C70, C72, C73, C75, C76, C80, C81, C83, C84,			
C86, C87, C91, C92	470nF	0603	44
C96, C97, C98, C99	2pF	0603	4
C118	OCV101M0JTR-0606	Capacitor Polarised	1
C119	1nF	0603	1
C122, C123	100nF	0805	2
D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11,	100111	0003	
D12, D13, D14, D15, D16, D17, D18, D19, D20,			
D21, D22, D23, D24, D25, D26, D27, D28, D29,			
D30, D31, D32, D33, D34, D35, D36, D37, D38,			
D39, D40, D41, D42, D43, D44	RB521S-30	Schottky Diode	44
D45	V2PL45HM3_H	Schottky Diode	1
ENC1, ENC2, ENC3	PEC12R-4130F-S0012	Undefined or Miscellaneous	3
IC1, IC2, IC3			3
IC4, IC5, IC6, IC7, IC8, IC9, IC10, IC11	MCP23S17-E_SS	Integrated Circuit	
	74HC14	Integrated Circuit	8
IC12, IC13	74AHC1G32	Integrated Circuit	2
IC14, IC15, IC16	MAX7221EWG+	Integrated Circuit	3
IC17, IC18, IC19, IC20, IC21	SN74LVC2T45DCT	Integrated Circuit	5
IC22	LM3475MFX_NOPB	Integrated Circuit	1
J1	M20-9740642	Connector	1
J2	XT60PW-M	Socket, DC supply, male, PIN: 2	1
L1	NRS5040T100MMGJ	Inductor	1
LED1, LED2, LED3	TOF-F4401AMG-N	LED 0805	3
LED_D1, LED_D2, LED_D3, LED_D4, LED_FUEL0,			
LED_FUEL1, LED_FUEL2, LED_FUEL3, LED_FUEL4,			
LED_FUEL5, LED_FUEL6, LED_FUEL7, LED_FUEL8,			
LED_RPM0, LED_RPM1, LED_RPM2, LED_RPM3,			
LED_RPM4, LED_RPM5, LED_RPM6, LED_RPM7,			
LED_RPM8, LED_RPM9, LED_RPM10, LED_RPM11,			
LED_RPM12, LED_RPM13, LED_RPM14,			
LED_RPM15, LED_RPM16, LED_SP0, LED_SP1,			
LED_SP2, LED_SP3, LED_SP4, LED_SP5, LED_SP6,			
LED_SP7, LED_SP8, LED_SP9, LED_SP10,			
LED_SP11, LED_SP12, LED_SP13, LED_SP14,			
LED_SP15, LED_SP16, LED_SP17, LED_SP18,			
LED_SP19, LED_SP20, LED_SP21, LED_SP22,			
LED_SP23, LED_SP24	LED_0805	LED 0805	55

R2, R4, R6, R11, R16, R21, R25, R32, R33, R40, R46, R47, R48, R49  R46, R47, R48, R49  R7, R10, R12, R13, R14, R15, R17, R18, R19, R20, R22, R26, R27, R28, R29, R30, R31, R36, R38, R39, R41  100  100  1003  1004  1005  1006  1007  1007  1008  100	Q1	SI2343CDS	MOSFET (P-Channel)	1
R1, R3, R5, R148, R154, R156 R2, R4, R6, R11, R16, R21, R25, R32, R33, R40, R46, R47, R48, R49 R46, R47, R48, R49 R47, R10, R12, R13, R14, R15, R17, R18, R19, R20, R22, R26, R27, R28, R29, R30, R31, R36, R38, R39, R41  100 0603 21 R8, R9, R24, R34, R35, R37 330 0603 22 R42, R43, R44, R45 80, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64 830 831 80603 12 R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88 820 0603 24 R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R107, R118, R119, R120, R127, R128, R129, R130, R131, R114, R115, R116, R117, R118, R119, R120, R127, R128, R129, R130, R131, R132, R133, R134, R155, R136, R137, R138, R139 R140 R141 4K7 0805 11 R141 4K7 0805 11 R142 1K5 0805 11 R144 120K 0603 11 RN14, R105 1600 3603 11 RN14, R105 3600 3603 11 RN14, R105 3800 3805 3900 3900 3900 3900 3900 3900 3900 39	Q2, Q5	PJL9411	MOSFET (P-Channel)	2
R2, R4, R6, R11, R16, R21, R25, R32, R33, R40, R46, R47, R48, R49  R46, R47, R48, R49  R7, R10, R12, R13, R14, R15, R17, R18, R19, R20, R22, R26, R27, R28, R29, R30, R31, R36, R38, R39, R41  100  100  1003  1004  1005  1006  1007  1007  1008  100	Q3, Q4, Q6	MMBT2222A	Integrated Circuit	3
R46, R47, R48, R49       1K       0603       14         R7, R10, R12, R13, R14, R15, R17, R18, R19, R20, R22, R26, R27, R28, R29, R30, R31, R36, R38, R39, R41       100       0603       21         R8, R9, R24, R34, R35, R37       330       0603       6         R23, R155       680       0603       2         R42, R43, R44, R45       2K7       0603       4         R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64       33       0603       12         R58, R59, R60       10K       0805       3         R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88       820       0603       24         R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R10, R102, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139       3K3       0603       48         R103, R104, R105       560       0603       3       48         R144       20K       0603       1         R143       33K       0603       1         R144       20K       0603       1         R144       20K       0603       1         R144       20K       0603 <td>R1, R3, R5, R148, R154, R156</td> <td>10K</td> <td>0603</td> <td>6</td>	R1, R3, R5, R148, R154, R156	10K	0603	6
R7, R10, R12, R13, R14, R15, R17, R18, R19, R20, R22, R26, R27, R28, R29, R30, R31, R36, R38, R39, R41  100 0603 21  R8, R9, R24, R34, R35, R37 330 0603 22  R42, R43, R44, R45 22K7 0603 24  R850, R51, R52, R53, R54, R55, R56, R57, R61, R62, R53, R64 33 0603 12  R858, R59, R60 10K 0805 3  R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88 820 0603 24  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R17, R128, R139, R134, R135, R136, R137, R138, R139 3K3 0603 48  R140 82 0603 1  R141 4K7 0805 1  R142 1K5 0805 1  R144 2 0K6 0603 1  R144 2 0K7 0805 1  R145, R146, R149, R150, R151, R152 1  R0K 0603 1  RN14, RN12, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN4, RN19, RN20, RN21, RN22, RN23, RN4, RN19, RN10, RN11, RN12, RN3, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN22, RN23, RN22, RN23, RN24, RN3, RN44, RN5, RN22, RN23, RN24, RN3, RN44, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN24,	R2, R4, R6, R11, R16, R21, R25, R32, R33, R40,			
R22, R26, R27, R28, R29, R30, R31, R36, R38, R39, R41 100 0603 21 R8, R9, R24, R34, R35, R37 330 6603 680 6603 22 R42, R43, R44, R45 2K7 0603 44 R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64 30 6603 12 R58, R59, R60 10K 0805 31 R58, R59, R60 R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88 820 0603 24 R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R122, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139 3K3 0603 48 R103, R104, R105 560 0603 31 R141 41 4K7 0805 11 R142 1K5 0805 11 R142 1K5 0805 11 R144 2CK 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, RN17, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 R145, R527, S55, S59, S512, S13, S14, S18, S28, S29, S31 1 S27-1-TW-F Switch TS27 Red 7 R55, S510, S15, S19, S26, S27, S34 1 S27-1-TW-F Switch TS27 Green 7 R55, S510, S15, S19, S26, S27, S34 1 S27-1-TW-F Switch TS27 Green 7 R55, S10, S15, S19, S26, S27, S34 1 S27-1-TW-F Switch TS27 Green 7 R55, S10, S15, S19, S26, S27, S34 1 S27-1-TW-F Switch TS27 Green 7 R55, S10, S15, S10, S15, S19, S26, S27, S34 1 S27-1-TW-F Switch TS27 Green 7 R55, S10, S1	R46, R47, R48, R49	1K	0603	14
R41 100 0603 21  R8, R9, R24, R34, R35, R37 330 0603 66  R23, R155 680 0603 22  R42, R43, R44, R45 247 0603 44  R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64 83 0603 12  R58, R59, R60 10K 0805 3  R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88 820 0603 24  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139 82 0603 348  R103, R104, R105 560 0603 3  R140 82 0603 348  R104, R105 82 0603 11  KK7 0805 11  R141 4K7 0805 11  R142 1K5 0805 11  R143 33K 0603 12  R144 20K 0603 11  R145, R146, R149, R150, R151, R152 100K 0603 11  R147 650K 0603 11  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23  S2, S23, S24, S25, S30, S32, S33, S35 1527-1-TW-Y Switch TS27 Red 77  S5, S10, S15, S19, S26, S27, S34 1527-1-TW-G Switch TS27 Green 77	R7, R10, R12, R13, R14, R15, R17, R18, R19, R20,			
R8, R9, R24, R34, R35, R37  R8, R9, R24, R34, R35, R37  R30  R603  R42, R43, R44, R45  R47, R43, R44, R45  R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64  R58, R59, R60  R63, R64  R75, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88  R85, R86, R87, R88  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R140  R141  R141  R141  R147  R155  R142  R143  R144  R164  R144  R175  R144  R176  R177  R18, R119, R120, R121, R122, R123, R124, R125, R144  R141  R141  R141  R147  R155  R144  R149  R149  R144  R149  R149  R149, R150, R151, R152  R144  R140  R141, R141, R15, R116, R117, R16, R117, R114, R115, R116, R117, R114, R115, R116, R117, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R124  R141  R141  R147  R148  R149  R149  R149  R149  R149  R149  R149, R150, R151, R152  R100K  R603  R147  R177, RN18, RN19, RN20, RN21, RN22, RN23  RN1, RN12, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23  R149, R149, R150, R33, S35  R527-1-TW-Y  Switch T527 Red  R755, S10, S15, S19, S26, S27, S34	R22, R26, R27, R28, R29, R30, R31, R36, R38, R39,			
R23, R155	R41	100	0603	21
R42, R43, R44, R45 R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64 R50, R61, R68, R69, R60 R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88 R85, R86, R87, R88 R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139 R140 R141 R141 R140 R20 R141 R141 R140 R141 R141 R141 R140 R141 R141	R8, R9, R24, R34, R35, R37	330	0603	6
R50, R51, R52, R53, R54, R55, R56, R57, R61, R62, R63, R64  R58, R59, R60  R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88  R85, R86, R87, R88  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R117, R112, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R140  R141  R142  R141  R142  R143  R144  R144  R144  R144  R144  R144  R144  R145  R145, R146, R149, R150, R151, R152  R144  R145, R146, R149, R150, R151, R152  R146, R147  R147  R148, R149, R150, R151, R152  R149, R149, R150, R151, R152  R140  R141, R141, R14, R141, R141, R141, R154, R16, R17, R144  R142  R143  R144  R144  R144  R155, R146, R149, R150, R151, R152  R147  R149, R149, R150, R151, R152  R147  R149, R149, R150, R151, R152  R147  R149, R149, R150, R151, R152  R147  R148, R149, R150, R151, R152  R149, R149, R150, R151, R152  R149, R149, R150, R151, R152  R141, RN18, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, SN1, RN14, RN15, RN16, SN1, SN14, SN16, SN28, SS3, S33, S35  R527-1-TW-Y  Switch T527 Feel  755, S10, S15, S19, S26, S27, S34	R23, R155	680	0603	2
R63, R64 33 0603 12 R58, R59, R60 10K 0805 3 R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88 820 0603 24 R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139 3K3 0603 48 R103, R104, R105 560 0603 3 R140 82 0603 11 R141 4K7 0805 11 R142 1K5 0805 11 R143 33K 0603 11 R144 20K 0603 11 R144 20K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 11 R145, R146, R149, R150, R151, R152 100K 0603 16 R147 650K 0603 17 RN11, RN12, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 23 S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 T527-1-TW-Y Switch T527 Feed 75 S5, S10, S15, S19, S26, S27, S34 T527-1-TW-G Switch T527 Green 77	R42, R43, R44, R45	2K7	0603	4
R58, R59, R60  R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R140  R140  R141  R142  R141  R142  R143  R144  R144  R155  R144  R144  R156  R144  R144  R156  R147  R146  R147  R147  R147  R148, R149, R150, R151, R152  R148, R146, R149, R150, R151, R152  R147  R149, R150, R151, R152  R10K  R147  R140, R141, RN12, RN13, RN14, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23  R15, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35  R527-1-TW-Y  Switch TS27 Feel  75, S10, S15, S19, S26, S27, S34  S24  S20  G603  G603  G603  G7  G805  G805  G805  G805  G805  G8063  G80	R50, R51, R52, R53, R54, R55, R56, R57, R61, R62,			
R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R103, R104, R105  S60  S60  S60  S60  S1  R140  S2  S60  S60  S60  S60  S60  R141  S7  S80  S81  S82  S83  S84  S85  S85  S85  S85  S85  S85  S85	R63, R64	33	0603	12
R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R140  R140  R141  R141  R142  R155  R142  R143  R144  R144  R144  R144  R154, R149, R150, R151, R152  R145, R146, R149, R150, R151, R152  R147  R147  R147  R148, R149, R150, R151, R152  R149, R150, R151, R152  R149, R149, R150, R151, R152  R140  R141, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23  R149, R149, R150, R151, R152, RN16, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23  R149, R25, S30, S32, S33, S35  R240  R25, S3, S11, S18, S28, S29, S31  R527-1-TW-R  Switch TS27 Feed  755, S10, S15, S19, S26, S27, S34	R58, R59, R60	10K	0805	3
R85, R86, R87, R88 820 0603 24  R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139 3K3 0603 48  R103, R104, R105 560 0603 3  R140 82 0603 1  R141 4K7 0805 1  R142 1K5 0805 1  R142 1K5 0805 1  R143 33K 0603 1  R144 20K 0603 1  R144 20K 0603 1  R144, R149, R150, R151, R152 100K 0603 1  R147 650K 0603 1  RN147, RN18, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN21, RN22, RN23 10K Resistor Network 0603 x 4 23  S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 TS27-1-TW-Y Switch TS27 Yellow 20  S2, S3, S11, S18, S28, S29, S31 TS27-1-TW-G Switch TS27 Green 7	R65, R66, R67, R68, R69, R70, R71, R72, R73, R74,			
R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R103, R104, R105  S60  O603  R140  82  O603  R141  4K7  O805  1  R142  1K5  O805  1  R143  33K  O603  1  R144  20K  O603  1  R144  20K  O603  1  R144  P145, R146, R149, R150, R151, R152  IOOK  O603  R147  O603  R147  O603  R147  O603  R147  O603  C603  C7  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23  S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35  T527-1-TW-Y  Switch T527 Yellow  20  S2, S3, S11, S18, S28, S29, S31  T527-1-TW-R  Switch T527 Red  7  Switch T527 Red	R75, R76, R77, R78, R79, R80, R81, R82, R83, R84,			
R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R103, R104, R105  S60  G603  R140  82  G603  R141  4K7  B82  G603  R141  K5  B82  G603  R142  R142  R143  R144  R144  R144  R144  R154  R144  R145, R149, R150, R151, R152  R146, R149, R150, R151, R152  R10K  R147  G50K  G603  R1  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN17, RN18, RN19, RN20, RN21, RN22, RN23  S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35  TS27-1-TW-F  Switch TS27 Yellow  7  S5, S10, S15, S19, S26, S27, S34  TS27-1-TW-G  Switch TS27 Green  7	R85, R86, R87, R88	820	0603	24
R99, R100, R101, R102, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  R103, R104, R105  S60  G603  R140  82  G603  R141  4K7  B82  G603  R141  K5  B82  G603  R142  R142  R143  R144  R144  R144  R144  R154  R144  R145, R149, R150, R151, R152  R146, R149, R150, R151, R152  R10K  R147  G50K  G603  R1  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN17, RN18, RN19, RN20, RN21, RN22, RN23  S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35  TS27-1-TW-F  Switch TS27 Yellow  7  S5, S10, S15, S19, S26, S27, S34  TS27-1-TW-G  Switch TS27 Green  7				
R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139  3K3  0603  48  R103, R104, R105  560  0603  3  R140  82  0603  1  R141  4K7  0805  1  R142  1K5  0805  1  R143  33K  0603  1  R144  20K  0603  1  R144, R149, R150, R151, R152  100K  0603  1  R147  650K  0603  1  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN20, RN21, RN22, RN3, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35  TS27-1-TW-Y  Switch TS27 Yellow  20  55, S10, S15, S19, S26, S27, S34  TS27-1-TW-G  Switch TS27 Green  7				
R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139 3K3 0603 48 R103, R104, R105 560 0603 3 R140 82 0603 1 R141 4K7 0805 1 R142 1K5 0805 1 R143 33K 0603 1 R144 20K 0603 1 R144 20K 0603 1 R144, R149, R150, R151, R152 100K 0603 1 R147 650K 0603 1 R147 650K 0603 1 RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 TS27-1-TW-Y Switch TS27 Yellow 20 S2, S3, S11, S18, S28, S29, S31 TS27-1-TW-R Switch TS27 Green 7	R99, R100, R101, R102, R106, R107, R108, R109,			
R126, R127, R128, R129, R130, R131, R132, R133,       3K3       0603       48         R134, R135, R136, R137, R138, R139       3K3       0603       3         R103, R104, R105       560       0603       3         R140       82       0603       1         R141       4K7       0805       1         R142       1K5       0805       1         R143       33K       0603       1         R144       20K       0603       1         R145, R146, R149, R150, R151, R152       100K       0603       6         R147       650K       0603       1         RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23       10K       Resistor Network 0603 x 4       23         S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35       TS27-1-TW-Y       Switch TS27 Yellow       20         S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Green       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	R110, R111, R112, R113, R114, R115, R116, R117,			
R134, R135, R136, R137, R138, R139       3K3       0603       48         R103, R104, R105       560       0603       3         R140       82       0603       1         R141       4K7       0805       1         R142       1K5       0805       1         R143       33K       0603       1         R144       20K       0603       1         R145, R146, R149, R150, R151, R152       100K       0603       6         R147       650K       0603       1         RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23       10K       Resistor Network 0603 x 4       23         S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35       TS27-1-TW-Y       Switch TS27 Yellow       20         S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Red       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	R118, R119, R120, R121, R122, R123, R124, R125,			
R103, R104, R105       560       0603       3         R140       82       0603       1         R141       4K7       0805       1         R142       1K5       0805       1         R143       33K       0603       1         R144       20K       0603       1         R145, R146, R149, R150, R151, R152       100K       0603       6         R147       650K       0603       1         RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN7, RN8, RN9, RN19, RN20, RN21, RN22, RN23       10K       Resistor Network 0603 x 4       23         S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35       TS27-1-TW-Y       Switch TS27 Yellow       20         S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Red       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	R126, R127, R128, R129, R130, R131, R132, R133,			
R140       82       0603       1         R141       4K7       0805       1         R142       1K5       0805       1         R143       33K       0603       1         R144       20K       0603       1         R145, R146, R149, R150, R151, R152       100K       0603       6         R147       650K       0603       1         RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23       10K       Resistor Network 0603 x 4       23         S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35       TS27-1-TW-Y       Switch TS27 Yellow       20         S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Red       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	R134, R135, R136, R137, R138, R139	3K3	0603	48
R141	R103, R104, R105	560	0603	3
R142	R140	82	0603	1
R143	R141	4K7	0805	1
R144 20K 0603 1  R145, R146, R149, R150, R151, R152 100K 0603 6  R147 650K 0603 1  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 23  S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 TS27-1-TW-Y Switch TS27 Yellow 20  S2, S3, S11, S18, S28, S29, S31 TS27-1-TW-R Switch TS27 Red 7  S5, S10, S15, S19, S26, S27, S34 TS27-1-TW-G Switch TS27 Green 7	R142	1K5	0805	1
R145, R146, R149, R150, R151, R152 100K 0603 6 R147 650K 0603 1  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 23 S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 TS27-1-TW-Y Switch TS27 Yellow 20 S2, S3, S11, S18, S28, S29, S31 TS27-1-TW-R Switch TS27 Red 7 S5, S10, S15, S19, S26, S27, S34 TS27-1-TW-G Switch TS27 Green 7	R143	33K	0603	1
R147 650K 0603 1  RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 23 S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 TS27-1-TW-Y Switch TS27 Yellow 20 S2, S3, S11, S18, S28, S29, S31 TS27-1-TW-R Switch TS27 Red 7 S5, S10, S15, S19, S26, S27, S34 TS27-1-TW-G Switch TS27 Green 7	R144	20K	0603	1
RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23	R145, R146, R149, R150, R151, R152	100K	0603	6
RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23	R147	650K	0603	1
RN10, RN11, RN12, RN13, RN14, RN15, RN16, RN17, RN18, RN19, RN20, RN21, RN22, RN23				
RN17, RN18, RN19, RN20, RN21, RN22, RN23 10K Resistor Network 0603 x 4 23 S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21, S22, S23, S24, S25, S30, S32, S33, S35 TS27-1-TW-Y Switch TS27 Yellow 20 S2, S3, S11, S18, S28, S29, S31 TS27-1-TW-R Switch TS27 Red 7 S5, S10, S15, S19, S26, S27, S34 TS27-1-TW-G Switch TS27 Green 7	RN1, RN2, RN3, RN4, RN5, RN6, RN7, RN8, RN9,			
S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21,       S22, S23, S24, S25, S30, S32, S33, S35       TS27-1-TW-Y       Switch TS27 Yellow       20         S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Red       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	RN10, RN11, RN12, RN13, RN14, RN15, RN16,			
S22, S23, S24, S25, S30, S32, S33, S35       TS27-1-TW-Y       Switch TS27 Yellow       20         S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Red       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	RN17, RN18, RN19, RN20, RN21, RN22, RN23	10K	Resistor Network 0603 x 4	23
S2, S3, S11, S18, S28, S29, S31       TS27-1-TW-R       Switch TS27 Red       7         S5, S10, S15, S19, S26, S27, S34       TS27-1-TW-G       Switch TS27 Green       7	S1, S4, S6, S7, S8, S9, S12, S13, S14, S16, S20, S21,			
S5, S10, S15, S19, S26, S27, S34 TS27-1-TW-G Switch TS27 Green 7	S22, S23, S24, S25, S30, S32, S33, S35	TS27-1-TW-Y	Switch TS27 Yellow	20
	S2, S3, S11, S18, S28, S29, S31	TS27-1-TW-R	Switch TS27 Red	7
S17, S36 TS27-1-TW-U Switch TS27 Blue 2	S5, S10, S15, S19, S26, S27, S34	TS27-1-TW-G	Switch TS27 Green	7
	S17, S36	TS27-1-TW-U	Switch TS27 Blue	2