Parts		Parts List	Model:GD8220/FCC ID:TW5GD8220
Name	Specifications	Location	
RES	$15 \text{K} \Omega \pm 1\% \ 1/16 \text{W} \ 0402 \ \text{SMD}$	R87	
RES	$470 \Omega \pm 5\% $ 1/16W 0402 SMD	R9 R16 R28	
RES	$20\mathrm{K}\Omega\pm5\%$ 1/16W 0402 SMD	R21	
RES	$56 \text{K} \Omega \pm 1\% 1/16 \text{W} 0402 \text{SMD}$	R2	
RES	$0\Omega \pm 5\%$ 1/16W 0402 SMD	R7 R10 R18 R32 R45 R47 R60	
RES	1.5 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R50 R83	
RES	2 K $\Omega \pm 5$ % $1/1$ 6W 0402 SMD	R30	
RES	$22\Omega\pm5\%$ 1/16W 0402 SMD	R3 R8 R46 L3 L4	
RES	22 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R40 R73	
RES	47 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R14 R23 R27 R61	
RES	5. 6K $\Omega \pm 5\%$ 1/16W 0402 SMD	R22	
RES	82 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R81	
RES	$100\Omega\pm5\%$ 1/16W 0402 SMD	R62	
RES	270 K $\Omega \pm 5\%$ $1/16$ W 0402 SMD	R36	
RES	$1 \text{K} \Omega \pm 5 \% \ 1/16 \text{W} \ 0402 \ \text{SMD}$	R15 R24 R25 R29 R38 R39	
RES	$10 \text{K} \Omega \pm 5 \% \ 1/16 \text{W} \ 0402 \ \text{SMD}$	R5 R44 R59 R82 R86 R150	
RES	100 K $\Omega \pm 5$ % $1/1$ 6W 0402 SMD	R17 R20 R37 R41 R42 R55 R84 R89	
RES	$1 \text{M}\Omega \pm 5 \text{\%}1/16 \text{W}0402\text{SMD}$	R1 R66	
RES	4.7 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R6 R11 R12 R13	
RES	$10\Omega \pm 5\%1/16$ W 0402 SMD	R31 R35	
RES	$33\Omega\pm5\%$ 1/16W 0402 SMD	R43	
RES	$0\Omega\pm5\%$ 1/8W 0805 SMD	R19	
RES	$2.2\Omega \pm 5\%$ 1/8W 0805 SMD	R69	
RES	$4 \times 22 \Omega \pm 5\% \ 1/16 \text{W} \ 0402 \ \text{SMD}$	RN1 RN2 RN6 RN7	
CAP	10PF±0.5PF 50V COG SMD 0402	C38 C57 C66 C81 C84 C85 C95 C131 C C147 C47	C132 C144 C180 C33 C119 C145 C146
CAP	100PF±5% 50V COG SMD 0402	C104 C105 C106 C140	
CAP	0.01uF±10% 25V X7R SMD 0402	C56 C73 C77 C83 C87 C88 C92 C93 C1	27 C142
CAP	1000PF±10% 50V X7R SMD 0402	C129	
CAP	0. 1uF±10% 16V X5R SMD 0402	C1 C2 C3 C4 C5 C6 C7 C8 C10 C11 C1 C31 C32 C36 C39 C40 C43 C48 C49 C5 C69 C71 C75 C80 C82 C90 C91 C94 C9 C122 C123 C124 C130 C133 C135 C137	2 C53 C55 C59 C60 C61 C62 C64 C68 8 C103 C114 C117 C118 C120 C121
CAP	1uF±10% 10V X5R SMD 0402	C15 C50 C51 C72 C78 C79 C97 C141 C	
CAP	220nF+80%~-20% 10V Y5V SMD 0402	C70	7.1.0
~ 111	220II .00% 20% IOT IOT OND 0102	010	

CAP	0.47uF±10% 6.3V X5R SMD 0402	C58
CAP	39PF±5% 50V COG SMD 0402	C125 C126
CAP	270PF±5% 50V COG SMD 0402	C74
CAP	47PF±5% 50V COG SMD 0402	C29 C107 C108 C109 C110 C111 C112 C113 C143
CAP	22nF±10% 16V X7R SMD 0402	C86 C139
CAP	2. 2uF±20% 6. 3V X5R SMD 0402	C9 C115 C160
CAP	4. 7uF±20% 6. 3V X5R SMD 0402	C20 C25 C27 C116
CAP	10uF+80%∼-20% 10V Y5V SMD 0805	C17 C23 C21 C45 C54 C63 C67 C89 C128 C134 C136 C65
CAP	100uF±20% 6.3V 3528 B NEC KEMET NICHICON AVX	EC2 EC3 EC4 C178
CAP	220uF±20% 6.3V 6032 C	EC1
IND	$80 \Omega \pm 25\%$ DCR \leq 0.15 Ω IDC \leq 200mA SMD 0603	L1 L2
IND	$10 \Omega \pm 25\%$ DCR \leq 0. 3Ω IDC \leq 200mA SMD 0805	L5 L7
IND	22uH±20% DCR≤0.611Ω IDC≤500mA φ3.0×3.5×2.1mm	L10
Diode	B5819W SOD-123 SMD	D10
Diode	1N4148 LL-34 SMD	D1 D4
Diode	SS34 DO-214AC SMD	D13
Diode	PGB101 SMD 0603 SMD	VR1
Diode	BAS16H SOD-323 SMD	D2 D7
Triode	3906 SOT-23 SMD	Q8
Triode	2SC4672 SOT-89 Q SMD	Q3
Triode	3904(S1A) SOT-23 LRC SMD	Q1
MOS	SI2301 P SOT-23 SMD	Q2
MOS	CE2312 SOT-23 SMD	Q4
IC	CMOS SENSOR OV7725 CSP2-28PIN	U9
IC	RTC9167A-33 SOT-25 AXELITE	U4 U6 U8 U10
IC	EUA4890 MSOP-8	U2 U58
IC	LM358 SOP-8	U12
IC	XC6206P182MR SOT-23	U7
IC	SN93350AFG LQFP128 SONiX	U1
IC	CT801 SOP24 Series	U3
IC	M25L1606 SOP8 GD8220	U5
Crystal	12.000000MHz±20PPM 20PF SMD 3225	Y1
SW	$6.0\times6.0\times4.3$ mm L=1.0mm	S5
SW	6.0×6.0×11.0mm L=7.5mm	S2
CAP	22PF±5% 50V COG SMD 0402	C148 C149 C150 C151 C152
LED	Red Green 60° φ3.0mm DIP	D11
Diode	60° IF=20mA RS-5038IRC-TK0902-Q60 φ5.0mm DIP	D9 D14 D15 D16 D17 D18 D19 D20 D21
MIC	φ6.0×2.7mm -38dB 3.0V DIP R	U41

Diode	XYC-PT5P520GC-IC DIP	R68
CON	2PIN PITCH=1.27mm H=13mm	J1 J2 J4 J5
	Module Parts List	
Name	Specifications	Location
IC	A7121 QFN32L	U2
RES	$51\Omega\pm5\%$ 1/10W 0603 SMD	R5
RES	39 K $\Omega \pm 5$ % $1/10$ W 0603 SMD	R1
IC	AP1110 QFN-8	U3
CAP	10PF±0.5PF 50V COG SMD 0402	C48 C12
IND	2.7nH±5% DCR≤0.2Ω IDC≤500mA SMD 0603	L2
RES	43 K $\Omega \pm 5$ % $1/10$ W 0603 SMD	R12
IND	2.7nH±5% DCR≤0.17Ω IDC≤400mA SMD 0402	L1
CAP	120PF±10% 50V X7R SMD 0603	C29
CAP	1000PF±10% 50V X7R SMD 0603 TDK	C21 C30 C50
CAP	20PF±5% 50V COG SMD 0603	C20
CAP	1000PF±10% 50V X7R SMD 0402	C49 C54 C58
CAP	1PF±0.25PF 50V COG SMD 0603	C6
CAP	27PF±5% 50V COG SMD 0603	C31
CAP	22PF±5% 50V COG SMD 0603	C32
CAP	390PF±5% 50V COG SMD 0603	C19
CAP	10uF+80%∼-20% 10V Y5V SMD 1206	C4
RES	1 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R8
CAP	0.1uF±10% 16V X5R SMD 0402	C13
CAP	$1 \mathrm{uF} \pm 10\%$ 10V X5R SMD 0402	C7 C57
CAP	1PF±0.1PF 50V COG SMD 0402	C33 C5
CAP	15PF±5% 50V COG SMD 0402	C42
CAP	22PF±5% 50V COG SMD 0402	C28
CAP	$2.5 \mathrm{PF} \pm 0.25 \mathrm{PF}$ 50V COG SMD 0402	C10
CAP	$5.6\text{PF} \pm 0.25\text{PF}$ 50V COG SMD 0402	C1 C11
CAP	0. 1uF+80%∼-20% 25V Y5V SMD 0603	C16 C3 C15 C22 C23 C14 C17 C2
CAP	1uF+80%~-20% 16V Y5V SMD 0603	C18
RES	43 K $\Omega \pm 5$ % $1/16$ W 0402 SMD	R9
IND	8.2nH \pm 0.1nH DCR \leqslant 0.33 Ω IDC \leqslant 300mA SMD 0402 Murata	L5
Triode	3906 SOT-23 SMD	Q2 Q3
Triode	BFG425W(P5) SOT-343R SMD	Q1
RES	$0\Omega \pm 5\%$ 1/16W 0402 SMD	L3
IC	RT9167-25 SOT-23-5	U1

Filter	SMD 2.5×2.0×1.0mm BF2520-B2R4CAC ACX	U4
IC	HWS314 SOT-363	U5
RES	9. 1K $\Omega \pm 5\%$ 1/16W 0402 SMD	R13
RES	$300\Omega\pm5\%$ 1/16W 0402 SMD	R4
RES	$270\Omega\pm5\%$ 1/16W 0402 SMD	R6
RES	$680\Omega\pm5\%$ 1/16W 0402 SMD	R20
RES	$750\Omega \pm 5\%$ 1/16W 0402 SMD	R3
RES	$510\Omega \pm 5\%$ 1/16W 0402 SMD	R7
CON	2PIN PITCH=1.27mm H=7mm	J4
CON	40PIN PITCH=1.27mm H=8mm	J2
Crystal	18.000000MHz ± 7.5PPM 15PF ±10PPM DIP HC-49S H=2.5mm	Y1