



AR2020-MPBGA78_Demo3Head_SER

P/N AR2020

Rev 0.2

RoHS

January 11, 2022

Item	Quantity	Part Reference	Value	Package	Description	Manufacturer	Manufacturer Part Number	Changes	Notes	Suitable Subs
1	5	C1 C29 C30 C40 C150	22uF	805	CAP, CERAMIC, 22UF, 10V, 20%, X6S, -55°C ~ 105°C, 0805, Automotive AEC-Q200 compliant	Murata	GRT21BC81A226ME13L			
2	11	C2 C9 C12 C19 C22 C25 C32 C46 C74 C77 C84	10uF	3216-18	CAP, TANTALUM CHIP, LOW ESR, 10uF, 10V, 10%, 3216	AVX	TPSA106K010R0900			
3	46	C3 C6 C7 C8 C10 C13 C14 C15 C16 C20 C21 C23 C26 C27 C28 C33 C38 C39 C42 C43 C44 C47 C48 C49 C51 C53 C54 C56 C58 C60 C62 C63 C64 C65 C66 C67 C68 C69 C71 C72 C75 C78 C79 C80 C85 C86	100nF	201	CAP, CERAMIC, 100nF, 10V, X7S, 20%, 0201, -55/+125C	TDK	C0603X751A104M030			
4	22	C34 C35 C36 C37 C50 C52 C55 C57 C59 C61 C70 C180 C181 C182 C184 C185 C187 C196 C197 C198 C199 C200	10uF	3216-18	CAP, TANTALUM CHIP, STD, 10uF, 10V, 10%, 3216	AVX	TAJA106K010R			TAJA106K010RNJ
5	1	C93	1uF	805	CAP, CERAMIC, 1uF, 25V, X7R, 10%, 0805	Murata	GCM21BR71E105KA56L			
6	1	C94	150pF	402	CAP, CERAMIC, 150pF, 50V, X7R, 10%, 0402	AVX	04025C151KAT2A			
7	1	D1	GRN	603	DIODE, LED, CHIP, GRN, CLEAR LENS, 2.0V, 20mA, SMD, 0603	Lite-On	LTST-C190KGKT			
8	1	J1	CON52-2x26-J (QFS)		CONN, SOCKET, HIGH SPEED, 2x26, 52 SIG PINS, 0.635MM PITCH, ALGNMNT PINS, 1 GND BUS PIN, LIGHT GOLD PLT'G, RETENTION PINS	Samtec	QFS-026-04.25-L-D-A-RT1			
9	1	L9	1.4A	603	IND, FERRITE CHIP, 220 OHM AT 100MHz, 0.1 OHM DC, 0603	Murata	BLM18PG221SN1D			
10	1	P7	HDR4-1x4-P		CONN, HEADER, VERTICAL, 1x4, 4 PIN, 2MM PITCH, THRU-HOLE	3M	951104-8622-AR			
11	3	P8 P10 P18	HDR3-1x3-P		CONN, HEADER, VERTICAL, 1x3, 3 PIN, 2MM PITCH, THRU-HOLE	3M	951103-8622-AR			
12	2	P13 P24	HDR6-2x3-P		CONN, HEADER, VERTICAL, 2x3, 6 PIN, 2MM PITCH, THRU-HOLE	3M	951206-8622-AR			
13	4	P15 P40 P41 P47	HDR2-1x2-P		CONN, HEADER, VERTICAL, 1x2, 2 PIN, 2MM PITCH, THRU-HOLE	3M	951102-8622-AR			
14	1	P20	HDR4-2x4-P (TMM)		CONN, HEADER, LOW PROFILE, VERTICAL, 2x4, 8 PIN, 2.0MM PITCH, 20 MIL SQ POSTS, THRU-HOLE	Samtec	TMM-104-01-G-D			
15	2	P25 P26	HDR10-2x5-P		CONN, HEADER, SHROUDED, VERTICAL, 2x5, 10 PIN, 2.0MM PITCH, CENTER POLARIZATION SLOT, THRU-HOLE	Molex	87831-1020			
16	1	P27	HDR4-2x2-P		CONN, HEADER, VERTICAL, 2x2, 4 PIN, 2MM PITCH, THRU-HOLE	3M	951204-8622-AR			
17	1	R4	1.37K	402	RESISTOR, PRECISION THICK FILM CHIP, SMD, 1.37K, 0.1W, 1%, 0402, AEC-Q200 compliant	Panasonic	ERJ2RKF1371X			
18	1	R5	4.32K	402	RESISTOR, PRECISION THICK FILM CHIP, SMD, 4.32K, 0.1W, 1%, 0402, AEC-Q200 compliant	Panasonic	ERJ2RKF4321X			
19	1	R7	0	603	RESISTOR, THICK FILM CHIP, SMD, 0 OHM JUMPER, 0.1W, 5%, 0603, AEC-Q200 compliant	Panasonic	ERJ3GEY0R00V			
20	15	R9 R13 R18 R19 R20 R32 R39 R40 R41 R42 R43 R44 R45 R46 R47	10K	402	RESISTOR, THICK FILM CHIP, SMD, 10K, 0.063W, 5%, 0402, AEC-Q200 compliant	Panasonic	ERJ2GEJ103X			
21	5	R10 R16 R34 R35 R48	0	402	RESISTOR, PRECISION THICK FILM CHIP, SMD, 0 Ohm, 0.1W, 1%, 0402, Automotive grade, AEC-Q200 compliant	Panasonic	ERJ2GE0R00X			
22	1	R23	560	402	RESISTOR, THICK FILM CHIP, SMD, 560 OHM, 0.063W, 5%, 0402, AEC-Q200 compliant	Panasonic	ERJ2GEJ561X			
23	4	R27 R28 R29 R31	33	402	RESISTOR, THICK FILM CHIP, SMD, 33 OHM, 0.063W, 5%, 0402, AEC-Q200 compliant	Panasonic	ERJ2GEJ330X			
24	1	R30	100K	402	RESISTOR, THICK FILM CHIP, SMD, 100K, 0.063W, 5%, 0402	Panasonic	ERJ2GEJ104X			
25	1	SW1	PB-SPST		SWITCH, PUSH BUTTON, TACTILE, MOM, 2 PIN, SPST-NO, 0.05A @ 24VDC, SMD	TE Connectivity	147873-2			
26	1	SW3	TS3A24157DGSR	MSOP10	IC, ANALOG SWITCH, DUAL SPDT, 600 mOHM, VOLTAGE SUPPLY 1.65V TO 3.6V, CURRENT SUPPLY 15nA, MSOP10	Texas Instruments	TS3A24157DGSR			
27	2	TP6 TP7	TSTPT-5016		CONN, TERMINAL, TEST POINT COMPACT, .015 THICK, SMT	Keystone Electronics	5016			
28	1	U1	NCP135BMT040TBG	WDFN6	IC, BIAS RAIL VOLTAGE REGULATOR, LDO, NON ACTIVE DISCHARGE, FIXED 0.4V, 500mA, 0.4V TO 5.5V INPUT, WDFN6	ON Semiconductor	NCP135BMT040TBG			NCV8135BMTW040TBG
29	4	U2 U3 U4 U5	NLV7S297D	SC70-6	IC, CONFIGURABLE MULTIFUNCTION GATE, SCHMITT-TRIGGER, 100mA, 1.65V TO 5.5V, SC70-6, AEC?Q101	ON Semiconductor	NLV7S297DFT2G			
30	1	U6	ADM6711	SC70-4	IC, SUPERVISOR, MICROPROCESSOR POWER SUPPLY, 2.93V, ACTIVE LOW RESET, SC70-4	Analog Devices	ADM6711SAKSZ-REEL7			
31	1	U7	NLSX4373DMR2G	Micro8	IC, LEVEL TRANSLATOR, DUAL, LOW VOLTAGE, 20MBPS, 1.5V TO 5.5V, Micro8, AEC-Q100	ON Semiconductor	NLSX4373DMR2G			
32	1	U8	N24C64UVTG	US8	IC, SERIAL EEPROM, 12C, 64Kbit, 1.8V, 1 MHz, USB, Automotive Grade-1	ON Semiconductor	N24C64UVTG			
33	1	U9	AR2020-DEMO_mPBGA78	mPBGA78	IC, SENSOR, ACTIVE-PIXEL DIGITAL IMAGE, CMOS, AR2020, DEMO HDBD, mPBGA78	ON Semiconductor	AR2020_mPBGA78			
34	1	U10	NCP59748MN1	DFN10	IC, VOLTAGE REGULATOR, LDO, LINEAR, ADJ, 1.5A, 0.8 TO 5.5V INPUT, 2.7V TO 5.5V Bias 0.8V TO 3.6V OUTPUT, DFN10	ON Semiconductor	NCP59748MN1ADJTBG			
35	1	Y1	27MHz		OSC, CRYSTAL CLOCK, SMD, CMOS, 1.7V TO 3.6V, 5mA, 27.0000MHz, 2.5MM x 2.0MM	MICREL	DSC1001DL5-027.0000T	Added to BOM		SG-8018CG 27.0000M-TJHPA3

Parts removed from Previous BOM
DSC1001DL5-024.0000T