

Component List

03B24

Version: 01
Revision: 0
Date: 10/05/2024



Description: Sample Production

#	Designator	Description	Value	PCB Footprint	Manufacturer	Part Number	SheetN umber	Notes
1	C1	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	3	
2	C2	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	3	
3	C3	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	3	
4	C4	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	3	
5	C5	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	3	
6	C6	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	3	
7	C7	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	3	
8	C8	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	3	
9	C9	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	5	
10	C10	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	5	
11	C11	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, 10%, X5R, 25V	22u	0805	MURATA	GRM21BR61E226ME44#	6	
12	C12	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, 10%, X5R, 25V	22u	0805	MURATA	GRM21BR61E226ME44#	6	
13	C13	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	6	
14	C14	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	6	
15	C15	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	6	
16	C16	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	6	
17	C17	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 1%, COG, 50V	47p	0603	MURATA	GRM188S5C1H470FA01#	6	
18	C18	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, ±10%, X7R, 10V	470n	0402	MURATA	GRM155R71A474KE01#	6	
19	C20	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, ±10%, X7R, 10V	470n	0402	MURATA	GRM155R71A474KE01#	6	
20	C21	Surface Mount Multilayer Ceramic Chip Capacitors (SMD MLCCs), 0603, 1%, COG, 50V	100p	0603	KEMET	CBR06C101F5GAC	6	
21	C22	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 1%, COG, 50V	47p	0603	MURATA	GRM188S5C1H470FA01#	6	
22	C23	Chip Multilayer Ceramic Capacitors for Automotive, 0603, 1%, COG, 50V	6p8	0603	MURATA	GCM1555C1H6R8FA16D	6	
23	C24	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 5%, COG, 50V	1n0	0402	MURATA	GRM1555C1H102JA01#	6	
24	C25	Surface Mount Multilayer Ceramic Chip Capacitors (SMD MLCCs), 0603, 1%, COG, 50V	100p	0603	KEMET	CBR06C101F5GAC	6	
25	C26	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 1%, COG, 50V	47p	0603	MURATA	GRM188S5C1H470FA01#	6	
26	C27	Chip Multilayer Ceramic Capacitors for Automotive, 0603, 1%, COG, 50V	6p8	0603	MURATA	GCM1555C1H6R8FA16D	6	
27	C28	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 1%, COG, 50V	68p	0402	MURATA	GCM1555C1H680FA16#	6	
28	C29	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 1%, COG, 50V	56p	0402	MURATA	GCM1555C1H560FA16#	6	
29	C30	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 1%, COG, 50V	68p	0402	MURATA	GCM1555C1H680FA16#	6	
30	C31	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 1%, COG, 50V	56p	0402	MURATA	GCM1555C1H560FA16#	6	
31	C33	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 5%, COG, 50V	1n0	0402	MURATA	GRM1555C1H102JA01#	6	
32	C34	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 1%, COG, 50V	47p	0603	MURATA	GRM188S5C1H470FA01#	6	
33	C35	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	6	
34	C36	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 5%, COG, 50V	12p	0402	MURATA	GCM1555C1H120JA16#	6	
35	C37	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 5%, COG, 50V	12p	0402	MURATA	GCM1555C1H120JA16#	6	
36	C38	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	4	
37	C39	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	4	
38	C40	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	4	
39	C41	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X7R, 100V	100n	0603	MURATA	GRM188R72A104KA35#	9	
40	C42	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	4	
41	C43	Chip Multilayer Ceramic Capacitors for Automotive, 1206, 10%, X7S, 100V	2u2	1206	MURATA	GCM31CC72A225KE02L	9	
42	C44	Chip Multilayer Ceramic Capacitors for Automotive, 1206, 10%, X7S, 100V	2u2	1206	MURATA	GCM31CC72A225KE02L	9	
43	C45	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, ±20%, X5R, 16V	22u	0603	SAMSUNG	CL10A226MO7J2NC	9	
44	C46	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, ±20%, X5R, 16V	22u	0603	SAMSUNG	CL10A226MO7J2NC	9	
45	C47	Chip Multilayer Ceramic Capacitors for General Purpose, 1206, 10%, X7R, 50V	4u7	1206	MURATA	GRM31CR71H475KA12#	9	
46	C48	Chip Multilayer Ceramic Capacitors for General Purpose, 1206, 10%, X7R, 50V	4u7	1206	MURATA	GRM31CR71H475KA12#	9	
47	C49	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 10%, X7R, 50V	100n	0402	MURATA	GCM155R71H104KE02#	9	
48	C50	Chip Multilayer Ceramic Capacitors for Automotive, 0805, 10%, X7R, 250V	10n	0805	TDK	CGA4J3X7R2E103K125AA	9	
49	C51	Chip Multilayer Ceramic Capacitors for Automotive, 1206, 10%, X7S, 100V	2u2	1206	MURATA	GCM31CC72A225KE02L	9	
50	C52	Chip Multilayer Ceramic Capacitors for Automotive, 1206, 10%, X7S, 100V	2u2	1206	MURATA	GCM31CC72A225KE02L	9	
51	C53	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	9	
52	C54	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	9	
53	C55	Chip Multilayer Ceramic Capacitors for Automotive, 0402, 1%, COG, 50V	470p	0402	MURATA	GCM1555C1H471FA16#	9	
54	C56	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	9	
55	C57	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	9	
56	C58	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, ±20%, X5R, 16V	22u	0603	SAMSUNG	CL10A226MO7J2NC	9	
57	C59	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	9	
58	C61	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	9	
59	C62	Chip Multilayer Ceramic Capacitors for General Purpose, 0805, ±20%, X5R, 16V	22u	0603	SAMSUNG	CL10A226MO7J2NC	9	
60	C63	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	4u7	0603	MURATA	GRM188R61E475KE11#	9	
61	C64	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	4u7	0603	MURATA	GRM188R61E475KE11#	9	
62	C65	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	9	
63	C66	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 10%, X5R, 25V	10u	0603	MURATA	GRM188R61E106KA73#	9	
64	C67	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 10%, X7R, 50V	100n	0402	MURATA	GRM155R71H104KE14#	4	
65	CON1	Header, Vertical Receptacle, 1.27 mm pitch; 0.50 mm lead width, 5 pins, 1 row, 5 pins per row, 6.75 mm L X 1.80 mm W X 4.55 mm H body	M50-3030542	SIP-5	HARWIN	M50-3030542	3	
66	CON2	Easy-On FFC/FFC Connector, 1.00mm Pitch, Slider Series, Vertical, 5.75mm Height, 8 Circuits, Gold	52610-0872	MOLEX 526100871	MOLEX	52610-0872	10	
67	D1	High Voltage Surface-Mount Schottky Barrier Rectifier	SS2PH10-M3/84A	DO-220AA	VISHAY	SS2PH10-M3/84A	9	

#	Designator	Description	Value	PCB Footprint	Manufacturer	Part Number	SheetN umber	Notes
68	D2	Zener Diode, 12V	BZV55-C12	MiniMELF	NXP	BZV55-C12	7	
69	D3	Small Signal Schottky Diodes	MCL101A	MicroMELF	VISHAY	MCL101A	7	
70	D4	Zener Diode, 12V	BZV55-C12	MiniMELF	NXP	BZV55-C12	7	
71	D5	Small Signal Schottky Diodes	MCL101A	MicroMELF	VISHAY	MCL101A	7	
72	IC1	4-Pin Phototransistor Optocoupler	TLP293	nSOIC-4	TOSHIBA	TLP293	7	
73	IC2	4-Pin Phototransistor Optocoupler	TLP293	nSOIC-4	TOSHIBA	TLP293	7	
74	IC3	4-Pin Phototransistor Optocoupler	TLP293	nSOIC-4	TOSHIBA	TLP293	7	
75	IC4	4-Pin Phototransistor Optocoupler	TLP293	nSOIC-4	TOSHIBA	TLP293	7	
76	J1	Easy-On FFC/FPC Connector, 1.00mm Pitch, Slider Series, Vertical, 5.75mm Height, 12 Circuits, Gold	52610-1272	MOLEX 526101271	MOLEX	52610-1272	10	
77	L1	SMD EMI Suppression Ferrite Bead, 0603	470 @ 100MHz	0603	WE	742792645	3	
78	L2	SMD EMI Suppression Ferrite Bead, 0603	470 @ 100MHz	0603	WE	742792645	6	
79	L3	WE-MI SMT Multilayer Inductor	0.47uH	0805	WE	74479032	6	
80	L4	WE-MI SMT Multilayer Inductor	0.47uH	0805	WE	74479032	6	
81	L5	SMD Power Inductor, 1050	33u	1050	WE	7447714330	9	
82	L6	WE-MPSB EMI Multilayer Power Suppression Bead	8 @ 100 MHz	0603	WE	7427922808	9	
83	L7	WE-MAPI SMT Power Inductor, 4020	15u	4020	WE	74438356150	9	
84	L8	SMD Inductor, WE-LQ, 1812	6uH	1812	WE	744045006	9	
85	Q1	NPN/NPN resistor-equipped transistors, R1=4k7 R2=47k	PUMH13	SOT363	NXP	PUMH13	7	
86	QR1	PNP/PNP resistor-equipped transistors, R1=4k7 R2=47k	PUMB13	SOT363	NXP	PUMB13	8	
87	R1	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	10k	0402	ROHM	MCR01MRTJ103	3	
88	R2	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	100R	0402	ROHM	MCR01MRTJ101	3	
89	R3	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	1k0	0402	ROHM	MCR01MRTJ102	3	
90	R4	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	100k	0402	ROHM	MCR01MRTJ104	5	
91	R5	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	4k7	0402	ROHM	MCR01MRTJ472	5	
92	R6	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	4k7	0402	ROHM	MCR01MRTJ472	5	
93	R7	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	100k	0402	ROHM	MCR01MRTJ104	6	
94	R8	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	100k	0402	ROHM	MCR01MRTJ104	6	
95	R9	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	100k	0402	ROHM	MCR01MRTJ104	6	
96	R10	Compact Thick Film Chip Resistors, RC0603, ±5%, 1/10W	1R8	0603	ROHM	MCR03ERTJ1R8	6	
97	R11	Compact Thick Film Chip Resistors, RC0402, ±1%, 1/16W	22k0	0402	ROHM	MCR01MRTF2202	6	
98	R12	Compact Thick Film Chip Resistors, RC0603, ±5%, 1/10W	1R8	0603	ROHM	MCR03ERTJ1R8	6	
99	R13	Compact Thick Film Chip Resistors, RC0402, ±1%, 1/16W	22k0	0402	ROHM	MCR01MRTF2202	6	
100	R14	Compact Thick Film Chip Resistors, RC0402, ±1%, 1/16W	1k00	0402	ROHM	MCR01MRTF1001	6	
101	R15	Compact Thick Film Chip Resistors, RC0402, ±1%, 1/16W	1k00	0402	ROHM	MCR01MRTF1001	6	
102	R16	Compact Thick Film Chip Resistors, RC0603, ±5%, 1/10W	120R	0603	ROHM	MCR03ERTJ121	8	
103	R17	Compact Thick Film Chip Resistors, RC0603, ±5%, 1/10W	120R	0603	ROHM	MCR03ERTJ121	8	
104	R18	Compact Thick Film Chip Resistors, RC0402, ±1%, 1/16W	137k	0402	ROHM	MCR01MRTF1373	9	
105	R19	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	100k	0402	ROHM	MCR01MRTJ104	9	
106	R21	Compact Thick Film Chip Resistors, RC0402, ±1%, 1/16W	20k0	0402	ROHM	MCR01MRTF2002	9	
107	R22	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	0R0	0402	ROHM	MCR01MRTJ000	7	
108	R24	Compact Thick Film Chip Resistors, RC0603, ±5%, 1/10W	1k8	0603	ROHM	MCR03ERTJ182	7	
109	R25	Compact Thick Film Chip Resistors, RC0603, ±5%, 1/10W	1k8	0603	ROHM	MCR03ERTJ182	7	
110	R26	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	47k	0402	ROHM	MCR01MRTJ473	7	
111	R27	Compact Thick Film Chip Resistors, RC1206, ±5%, 1/4W	4k7	1206	ROHM	MCR18ERTJ472	7	
112	R28	Compact Thick Film Chip Resistors, RC0402, ±5%, 1/16W	47k	0402	ROHM	MCR01MRTJ473	7	
113	R29	Compact Thick Film Chip Resistors, RC1206, ±5%, 1/4W	4k7	1206	ROHM	MCR18ERTJ472	7	
114	U1	32-bit Arm Cortex-M0+ , USB, and Advanced Analog	ATSAMD21E18A-AF	TQFP32	MICROCHIP	ATSAMD21E18A-AF	3	
115	U2	4-Mbit, 2.7V Minimum SPI Serial Flash Memory	AT25SF041B-SSHx-x	nSOIC-8	DIALOG	AT25SF041B-SSHx-x	5	
116	U3	8k I2C Serial EEPROM	24AA08-I/OT	SOT23-5	MICROCHIP	24AA08-I/OT	5	
117	U4	Multiprotocol NFC Frontend versione Plus	CLRC66303HN	HVQFN32	NXP	CLRC66303HN	6	
118	U5	MAX3232E 3-V to 5.5-V Multichannel RS-232 Line Driver and Receiver With ±15- KV IEC ESD Protection	MAX3232EIPWR	TSSOP-16	TI	MAX3232EIPWR	4	
119	U6	MagI ² C-FIMM Fixed Isolated MicroModule 5V Input / 1W / 3kV Functional Isolated / Unregulated 5V Output	1769205132	9x7x3,1	WE	1769205132	9	
120	VR1	Step-Down Converter With High Efficiency Eco-mode	LMR14010ADDCx	SOT23-6	TI	LMR14010ADDC	9	
121	VR2	500 mA Peak Output LDO Regulator	MIC5219-5.0YMT	TDFN-6	MICROCHIP	MIC5219-5.0YMT	9	
122	VR3	Low Voltage 1A Voltage Regulator (LDO Regulator) 6.5Vin	RP132K331F-TR	DFN-1820-6	NISSHINBO	RP132K331F-TR	9	
123	Y1	SMD Quartz Crystal - JXS22-WA, 27.12MHz ±10ppm Cristalli 10pF 4-SMD, senza piombo	27.12MHz	OSC 2.5x2.0	JAUCH	Q 27.120-JXS22-10-10/10-FJ-WA-LF	6	
Notes:								