

Bill of Materials



Project

Information Barrier

Schematic Design

IB Phase III Analogue Board (4uS) Issue 3.0

PCB Design

Analogue Board MGP_0367.ISSUEB

#	Designator	Value	Description	Manufacturer No.	Supplier	Part No.	Quantity
1	R1, R5, R26, R31	15K	RESISTOR, 1206 15K	MC 0.125W 1206 +/- 1% 15K	Farnell	5083139	4
2	R2, R4, R8, R15, R18, R34	8K2	RESISTOR, 1206 8K2	MC 0.125W 1206 +/- 1% 8K2	Farnell	9336877	6
3	R3, R6, R27, R33	20K	RESISTOR, 1206 20K	MC 0.125W 1206 +/- 1% 20k	Farnell	9336125	4
4	R7, R12, R13, R16, R17, R19, R20, R28-R30, R36, R37, R41, R45, R73, R80-R82, R94-R96, R99, R100	2R2	RESISTOR, 1206 2R2	MC 0.125W 1206 +/- 5% 2R2	Farnell	9337253	23
5	R9	51K	RESISTOR, 1206 51K	MC 0.125W 1206 +/- 1% 51K	Farnell	9336630	1
6	R11	180K	RESISTOR, 1206 180K	MC 0.125W 1206 +/- 1% 180K	Farnell	9336087	1
7	R10, R14, R35, R38, R46-R53, R74, R83, R88, R102	10K	RESISTOR, 1206 10K	MC 0.125W 1206 +/- 1% 10K	Farnell	9335765	15
8	R21	45K3	+/- 0.1% 0.1W	MCTC0525B4532T5E	Farnell	1575977	1
9	R22	90K9	+/- 0.1% 0.1W	MCTC0525B9092T5E	Farnell	1576009	1
10	R23	182K	+/- 0.1% 0.1W	MCTC0525B1823T5E	Farnell	1576044	1
11	R24	365K	+/- 0.1% 0.1W	MCTC0525B3653T5E	Farnell	1576079	1
12	R25	100R	+/- 0.01% 0.6W	Y0785100R000T9L	Farnell	1203343	1
13	R32, R62-R69	10R	RESISTOR, 1206 10R	MC 0.125W 1206 +/- 1% 10R	Farnell	9335790	9
14	R39	11K3	+/- 0.1% 0.1W	MCTC0525B1132T5E	Farnell	1575905	1
15	R40	5K62	+/- 0.1% 0.1W	MCTC0525B5621T5E	Farnell	1575873	1
16	R42	1K	RESISTOR, 1206 1K	MC 0.125W 1206 +/- 1% 1K	Farnell	9335757	1
17	R43	200R	RESISTOR, 1206 200R	MC 0.125W 1206 +/- 1% 200R	Farnell	9336109	1
18	R44	6K2	RESISTOR, 1206 6K2	MC 0.125W 1206 +/- 1% 6K2	Farnell	9336729	1
19	R54-R61, R78, R92	100K	RESISTOR, 1206 100K	MC 0.125W 1206 +/- 1% 100K	Farnell	9335773	10
20	R70	732K	+/- 0.1% 0.1W	MCTC0525B7323T5E	Farnell	1576111	1
21	R71	22K6	+/- 0.1% 0.1W	MCTC0525B2262T5E	Farnell	1575943	1
22	R72, R79, R87, R97, R98	22R	RESISTOR, 1206 10R	MC 0.125W 1206 +/- 1% 22R	Farnell	9336192	5
23	R75	150K	RESISTOR, 1206 150K	MC 0.125W 1206 +/- 1% 150K	Farnell	9335978	1
24	R76, R103	51R	RESISTOR, 1206 51R	MC 0.125W 1206 +/- 1% 51R	Farnell	9336656	2
25	R77	3K3	RESISTOR, 1206 3K3	MC 0.125W 1206 +/- 1% 3K3	Farnell	9336362	1
26	R84	2K2	RESISTOR, 1206 2K2	MC 0.125W 1206 +/- 1% 2K2	Farnell	9336168	1
27	R85	10M	MRS25 +/- 1% 0.6W	MRS25 10M	Farnell	9464018	1
28	R86	68K	RESISTOR, 1206 68K	MC 0.125W 1206 +/- 1% 68K	Farnell	9336788	1
29	R89	82K	RESISTOR, 1206 82K	MC 0.125W 1206 +/- 1% 82K	Farnell	9336885	1
30	R90	2K	RESISTOR, 1206 2K	MC 0.125W 1206 +/- 1% 2K	Farnell	9336117	1
31	R91	1M	RESISTOR, 1206 1M	MC 0.125W 1206 +/- 1% 1M	Farnell	9335781	1
32	R93	200K	RESISTOR, 1206 200K	MC 0.125W 1206 +/- 1% 200K	Farnell	9336133	1
33	R101	5K6	RESISTOR, 1206 5K6	MC 0.125W 1206 +/- 1% 5K6	Farnell	9336672	1
34	C1, C4, C8, C29, C32, C42	470pF	EXFS/HR +/-1% 63V	EXFS/HR 470PF	Farnell	9520228	6

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35	C2, C5, C7, C9, C12, C13, C16, C28, C30, C34, C35, C37, C39, C47, C48, C52, C53, C57, C60, C68, C70, C72, C73, C78, C80	10nF	COG 100V	C0805C103J5GAC	Farnell	1535573	25
36	C3, C6, C10, C11, C14, C15, C27, C31, C33, C36, C38, C46, C49, C51, C54, C56, C61, C66, C69, C71, C79, C81	10uF	X7R 25V	C1210C106K3RAC	Farnell	1358512	22
37	C18	100nF	Polyester 100V	BFC247086104	Farnell	1166048	1
38	C19-C26	100nF	X7R 100nF 50V	K104K15X7RF53L2	Farnell	1469310	8
39	C41, C43	10pF	COG/NPO 100V	08051A100JAT2A	Farnell	499158	2
40	C44, C45, C64	10uF	X7R 50V	CKG57NX7R1H106M	RS	5477219	3
41	C50, C55, C58, C59, C74-C77	1nF	COG/NPO 50V	08055A102JAT2A	Farnell	317457	8
42	C62, C63	22pF	COG/NPO 100V	SR151A220JTR	Farnell	1100369	2
43	C65	22pF	FSC 160V 22PF	FSC 160V 22PF +/- 1PF	Farnell	9519971	1
44	C67	47nF	Polyester 100V	BFC247086473	Farnell	1166046	1
45	U1-U3, U5, U8, U11, U14	AD8034	OP AMP	AD8034ARZ	Farnell	8621527	7
46	U4, U13	MAX998ESA	COMPARATOR	MAX998ESA+	Farnell	1550498	2
47	U6, U7	DG418L	SWITCH	DG418LDY-E3	Farnell	1077105	2
48	U9	74AHC	74AHC SINGLE GATE	74AHC1G04GW/T1	Farnell	1085239	1
49	U10	ATTINY13A	AVR	ATTINY13-20PU	Farnell	9171550	1
50	U12	MC74HC00ADG	IC, 74HC CMOS, SMD, 74HC00	MC74HC00ADG	Farnell	9666885	1
51	U15	Flip Flop - D Type	DUAL D FLIP-FLOP	MC74HC74ADG	Farnell	9667016	1
52	Q1-Q8	MMBT2222LT1G	NPN BJT TRANSISTOR	MMBT2222BT1G	Farnell	1653622	8
53	D1-D3	BAT854W	SCHOTTKY DIODE	BAT854W	Farnell	1757756	3
54	J1	GND BAR	GND Bar Link	D3082F05	Farnell	175319	1
55	J2	BNC SKT	BNC PCB SQ 50	1-1337445-0	Farnell	1205964	1
56	J3-J12, J15-J20	TEST PIN	LOOP TEST PIN	TEST-12	Farnell	1702008	16
57	J13	EURO CARD SOCKET	DIN41612 2A	N/A	RS	5083117	1
58	J14	SMA SKT	SMA PCB SQ 50	5-1814832-1	Farnell	1248990	1
59	J21	IC SOCKET	IC SOCKET	2227MC-08-03-18-F1	Farnell	1103844	1
60	JP1	JUMPER2	3 WAY HEADER	M20-9990345	Farnell	1022248	1
61	JP2	JUMPER	2 WAY HEADER	M20-9990245	Farnell	1022245	1
62	JP3	JUMPER SOCKET RED	JUMPER SOCKET RED	M7566-05	Farnell	150411	1
62	RL1-RL8	DIP05-1A72-BV710	SPNO Relay	DIP05-1A72-BV710	RS	291-9710	8
64	RV1	500K	Trimmer, 25 Turn 500K	3296W-1-504LF	Farnell	9353313	1
65	RV2	50K	Trimmer, 25 Turn 50K	3296W-1-503LF	Farnell	9353305	1
66	X1	14.7456MHz	CRYSTAL	CA-14.7456-18-3050-X	Farnell	1538745	1