

PLEASE report any inconsistencies you might find in the BOM to shoe@enterlogic.se

READ THROUGH THE ENTIRE DOCUMENT BEFORE PROCEEDING, **IMPORTANT INFORMATION AT THE END.**

Green marked posts are populated at factory

Gray marked are available as option when ordering from enterlogic

Position	Quantity	Description	Manufacturer	Manufacturer Part Number	Digi-Key	Mouser
C98,C72,C6,C7,C8,C16,C33,C46,C63,C68,C69,C70,C71,C87,C88,C97,C109,C110,C111,C112,C113,C115,C116,C117,C118,C119	26	CAP CER 0.1UF 50V X7R 0603	YAGEO	CC0603JRX7R9BB104	311-1779-2-ND	603-CC603JRX7R9BB104
C89,C21,C54,C55,C77,C78,C81,C83	8	0.047 µF ±10% 100V Ceramic Capacitor X7R 0603	Würth Elektronik	885012206118	732-12192-2-ND	
C92	1	20 pF ±5% 100V Ceramic Capacitor C0G, NP0 0603	YAGEO	CC0603JRNPO0BN200	311-1754-2-ND	
C100	1	10 µF ±20% 25V Ceramic Capacitor X5R 0805	Taiyo Yuden	TMK212BBJ106MG-T	587-6025-2-ND	
C1,C3,C4,C5,C108	5	1 µF ±10% 50V Ceramic Capacitor X5R 0603	Samsung Electro-Mechanics	CL10A105KB8NNNC	1276-1860-2-ND	
C2,C9,C13,C14,C15,C18,C19,C20,C29,C30,C34,C36,C37,C40,C41,C43,C44,C47,C48,C49,C50,C51,C52,C53,C56,C57,C58,C59, C65,C67,C96, C120	32	0.22 µF ±10% 50V Ceramic Capacitor X7R 0603	Samsung Electro-Mechanics	CL10B224KB8NNNC	1276-CL10B224KB8NNNCTR-ND	
C114	1	100 pF ±10% 50V Ceramic Capacitor X7R 0603	KEMET	C0603C101K5RACTU	399-C0603C101K5RACTUTR-ND	
C17,C75,C79,C80,C82	5	0.33 µF ±10% 50V Ceramic Capacitor X5R 0603	TDK Corporation	C1608X5R1H334K080AB	445-7462-2-ND	
C22,C23,C24,C25,C26,C27,C28,C35,C38,C39,C73,C74	12	22 pF ±5% 50V Ceramic Capacitor C0G, NP0 0603	YAGEO	CC0603JRNPO9BN220	311-1062-2-ND	
C31,C32,C45,C42	4	27 pF ±5% 50V Ceramic Capacitor C0G, NP0 0603	KEMET	C0603C270J5GAC7867	399-C0603C270J5GAC7867TR-ND	
C60	1	0,01uF ±10% 100V Ceramic Capacitor X7R 0603	Murata Electronics	GCM188R72A103KA37D	490-4781-2-ND	
C61,C62,C99,C104,C105	5	0.47 µF ±10% 50V Ceramic Capacitor X5R 0603	Taiyo Yuden	UMK107ABJ474KA-T	587-3171-2-ND	
C10,C11,C12,C76	4	CAP ALUM 470UF 20% 16V RADIAL	Würth Elektronik	860020374012	732-8799-1-ND	710-860020374012
C66	1	CAP ALUM 1000UF 20% 6.3V T/H	Illinois Capacitor	108CKS6R3M	1572-1314-ND	598-108CKS6R3M
C84,C85,C106,C107	4	CAP ALUM 22UF 20% 35V RADIAL TH	Panasonic Electronic Components	EEU-FC1V220H	P19678CT-ND	
C86	1	CAP ALUM 10UF 63V 20% RADIAL	Kemet	ESK106M063AC3AA	399-6100-ND	140-REA100M1JBK0511P
C101,C102	2	3900 pF Film Capacitor 63V 100V Polypropylene	KEMET	PHE426DJ4390JR05	399-PHE426DJ4390JR05-ND	
C90,C91,C94,C95	4	6800 pF Film Capacitor 63V 100V	KEMET	R82EC1680Z350J	399-19324-ND	
C93	1	CAP TRIMMER 10-50PF 100V TH	EW Electronics	GKG50015	2447-GKG50015-ND	Not available
C103	1	CAP 100MF -20% +80% 5.5V T/H	Elna America	DX-5R5V104U	604-1030-ND	555-DX-5R5V104U
Alternative C103		330 mF (EDLC) Supercapacitor 5.5 V Axial, Can - Vertical	CDA (Zhifengwei Technology)	CB5R5334VF-ZJ	4688-CB5R5334VF-ZJ-ND	
D1,D2,D3,D4,D5,D6,D7,D8,D9,D11,D12,D13,D14,D15,D16,D17,D18,D20,D21,D30,D31,D32,D33,D34,D36,D38,D39,D41,D42,D43,D44,D45	32	TVS DIODE 5VWM 9.2VC DO214AC	YAGEO	SMAJ5.0CA/TR13	13-SMAJ5.0CA/TR13CT-ND	603-SMAJ5.0CA/TR13
D19,D37,D40,D22,D23,D24,D25,D26,D27,D29,D35	11	DIODE GP BAS16 100V 200MA SOT23-3	onsemi	SBAS16LT1G	SBAS16LT1GOSTR-ND	
D46	1	Green 570nm LED Indication - Discrete 2V 0805	Würth Elektronik	150080VS75000	732-4986-2-ND	
E1	1	FILTER LC(T) 470PF TH	Murata Electronics North America	DSS1NB32A471Q91A	490-9793-1-ND	81-DSS1NB32A471Q91A
FB1,FB2,FB3,FB6	4	FERRITE CHIP 4A 120 OHM SMD	Laird-Signal Integrity Products	HI1206P121R-10	240-2410-1-ND	875-HI1206P121R-10
FB4,FB5	2	50 Ohms @ 100 MHz Ferrite Bead 1206 6A 10mOhm	Laird-Signal Integrity Products	HI1206T500R-10	240-2412-2-ND	
FB7	1	60 Ohms @ 100 MHz Ferrite Bead 0603<30mOhm	Laird-Signal Integrity Products	HI0603P600R-10	240-2376-2-ND	875-HI0603P600R-10
R182	1	RES 1 OHM 1/2W 1% AXIAL	Vishay / BC Components	SFR25H0001008FR500	BC4398CT-ND	594-5053HD1R000F
R183,R184	2	RES SMD 10 OHM 1% 1/2W 1206	Stackpole Electronics Inc	RNCP1206FTD10R0	RNCP1206FTD10R0CT-ND	71-CRCW120610R0FKEAH
R213	1	RES 1K OHM 1/4W 5% 1206	Stackpole Electronics Inc	RMCF1206JT1K00	RMCF1206JT1K00CT-ND	667-ERJ-8GEYJ102V
R259	1	RES SMD 75R 1206	Stackpole Electronics Inc	RMCF1206FT75R0	RMCF1206FT75R0TR-ND	
R218,R243	2	RES 100 OHM 1% 1/4W 0805	KOA Speer Electronics, Inc.	RK73H2ATTD1000F	2019-RK73H2ATTD1000FTR-ND	
R146,R1,R11,R12,R13,R14,R15,R16,R17,R18,R39,R40,R54,R56,R62,R106,R110,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,R140,R141,R142,R143,R144,R145,R147,R148,R164,R168,R169,R170,R171,R172,R173,R174,R175,R64,R225,R226,R227,R228,R229,R230,R231,R232,R236	69	RES 68 OHM 1% 1/10W 0603	YAGEO	RC0603FR-0768RL	311-68.0HRTR-ND	603-RC0603FR-0768RL
R271,R272	2	RES 120 OHM 1% 1/10W 0603	Stackpole Electronics Inc	RMCF0603FT120R	RMCF0603FT120RTR-ND	
R2,R3,R4,R5,R6,R7,R8,R9,R28,R29,R30,R31,R61,R63,R68,R71,R72,R73,R76,R78,R79,R80,R81,R82,R83,R84,R85,R86,R109,R163,R165,R180,R188,R191,XR4,R258	36	RES 4.7K OHM 1% 1/10W 0603	Stackpole Electronics Inc	RMCF0603FT4K70	RMCF0603FT4K70TR-ND	
R19,R20,R21,R22,R23,R24,R37,R57,R58,R59,R60,R152,R240,R244	14	RES 15 OHM 1% 1/10W 0603	Walsin Technology Corporation	WR06X15R0FTL	1292-WR06X15R0FTLTR-ND	
R25,R26,R27,R32,R33,R34,R35,R36,R38,R44,R45,R47,R52,R53,R70,R75,R105,R138,R179,R193,R194,R196,R197,R198,R199,R200,R201,R202,R205,R206,R208,R210,R211,R212,R234,R235,R237,R238,R239,R241,R242,R245,R246,R247,R248,R249,R251,R260,R261,R262,R263,R264,R265,R268,R269,R270,R273,R274,R275,XR5,R149,R150,R139	63	RES 10K OHM 5% 1/10W 0603	Stackpole Electronics Inc	RMCF0603JT10K0	RMCF0603JT10K0TR-ND	708-RMCF0603JT10K0
R41,R42,R43,R55,R65,R67,R107,R108,R162,R176,R177,R178	12	RES 27 OHM 1% 1/10W 0603	YAGEO	RC0603FR-0727RL	311-27.0HRTR-ND	603-RC0603FR-1327RL
R46	1	RES SMD 100 OHM 1% 1/8W 0603	Vishay Beyschlag	MCT06030C1000FP500	MCT0603-100-CFCT-ND	594-MCT06030C1000FP5
R48,R49,R50,R137,R216,R217	6	RES 390 OHM 1/10W 5% 0603 SMD	Panasonic – ECG	ERJ-3GEYJ391V	P390GCT-ND	667-ERJ-3GEYJ391V
R51,R91,R92,R99,R100,R103,R104,R156,R181,R185,R186,R190,R214,R215,R10	15	RES 1K OHM 1% 1/10W 0603	YAGEO	RC0603FR-071KL	311-1.00KHRTR-ND	603-RC0603FR-071KL
R66,R69,R74,R87,R88,R89,R90,R93,R94,R95,R96,R97,R98,R101,R102,R151,R153,R161,R266,R267	20	RES 470 OHM 1% 1/10W 0603	Walsin Technology Corporation	WR06X4700FTL	1292-WR06X4700FTLTR-ND	
R77,R166,R220,R223, R167,R219	6	RES SMD 47 OHM 1% 1/10W 0603	Panasonic Electronic Components	ERJ-3EKF47R0V	P47.0HCT-ND	667-ERJ-3EKF47R0V
R222, R224	2	RES SMD 33 OHM 1% 1/10W 0603	Panasonic Electronic Components	ERJ-3EKF33R0V	P33.0HTR-ND	
R154,R155,R157	3	RES 49.9 OHM 1% 1/10W 0603	Stackpole Electronics Inc	RMCF0603FT49R9	RMCF0603FT49R9TR-ND	
R158,R159,R160	3	RES 24.9 OHM 1% 1/10W 0603	YAGEO	RC0603FR-0724R9L	311-24.9HRTR-ND	
R187,R192,R195	3	RES SMD 2.7K OHM 1% 1/8W 0603	Vishay Beyschlag	MCT06030C2701FP500	MCT0603-2.70K-CFCT-ND	594-MCT06030C2701FP5
R189,R207,R209	3	RES SMD 470K OHM 1% 1/8W 0603	Vishay Beyschlag	MCT06030C4703FP500	MCT0603-470K-CFCT-ND	594-MCT06030C4703FP5

R203,R204	2	RES 680 OHM 1% 1/10W 0603	Walsin Technology Corporation	WR06X6800FTL	1292-WR06X6800FTLTR-ND	
R233	1	200 Ohms ±1% 0.5W, 1/2W Chip Resistor 0603 Thick Film	KOA Speer Electronics, Inc.	SG73P1JTTD2000F	2019-SG73P1JTTD2000FTR-ND	
R250,R252,R253,R254,R255,R257,R111,R221,R276	9	RES SMD 75 OHM 1% 1/8W 0603	Vishay Beyschlag	MCT06030C7509FP500	MCT0603-75.0-CFCT-ND	594-MCT06030C7509FP5
R256	1	RES SMD 4.02K OHM 1% 1/10W 0603	Panasonic Electronic Components	ERJ-3EKF4021V	P4.02KHCT-ND	667-ERJ-3EKF4021V
XR2,XR3,XR7,XR9,XR11	5	RES SMD 0 OHM JUMPER 1/10W 0603	Panasonic Electronic Components	ERJ-3GEY0R00V	P0.0GTR-ND	667-ERJ-3GEY0R00V
U2	1	IC SHFT REG PAR-LD 8BIT 16-SOIC	Texas Instruments	SN74LS166ADR	296-49900-2-ND	
U7	1	IC GATE XOR 4CH 2-INP 14SOIC	Texas Instruments	SN74LS86ADR	296-14901-2-ND	
U8	1	IC SUPERVISOR 1 CHANNEL SOT23A-3	Microchip Technology	TC54VC4302ECB713	TC54VC4302ECB71TR-ND	
U9	1	IC GATE XOR 4CH 2-INP 14SOIC	Texas Instruments	SN74F86DR	296-14825-2-ND	
U18	1	IC GATE XOR 4CH 2-INP 14SOIC	Nexperia USA Inc.	74AHCT86D,118	1727-6554-2-ND	
U39	1	IC GATE OR 4CH 2-INP 14SOIC	Texas Instruments	SN74LS32DR	296-14891-2-ND	
U27	1	IC OPAMP JFET 4MHZ 14SO	STMicroelectronics	TL084IDT	497-2220-1-ND	511-TL084IDT
U29	1	IC TRANSCEIVER FULL 3/5 28TSSOP	Texas Instruments	MAX3243CDBR	296-6941-2-ND	
U17	1	Shunt Voltage Reference IC Fixed 1.235V V ±2% 20 mA 8-SOIC	Texas Instruments	LM385DR-1-2	296-26104-2-ND	
U10	1	IC BUFF/DVR HEX NON-INV 14SOIC	Texas Instruments	SN7407DR	296-1018-1-ND	595-SN7407DR
U3	1	IC PLD 8MC 15NS 20SOIC	Microchip Technology	ATF16V8B-15SU	ATF16V8B-15SU-ND	
U5	1	IC MCU 8BIT 1.75KB FLASH 18SOIC	Microchip Technology	PIC16F627A-I/SO	PIC16F627A-I/SO-ND	579-PIC16F627A-I/SO
U11	1	IC MCU 8BIT 1.75KB FLASH 18SOIC	Microchip Technology	PIC16F84A-20I/SO	PIC16F84A-20I/SO-ND	
Alternative U11		IC MCU 8BIT 1.75KB FLASH 18SOIC	Microchip Technology	PIC16F84A-04/SO	PIC16F84A-04/SO-ND	
U12	1	IC MCU 8BIT 2KB FLASH 14SOIC	Atmel	ATTINY24A-SSUR	ATTINY24A-SSURCT-ND	556-ATTINY24A-SSUR
U30	1	IC SWITCH SPDTX2 900MOHM 10VSSOP	Texas Instruments	TSSA23159DGST	296-23304-2-ND	
U31	1	Video Amp 6 Filter 20-TSSOP	Texas Instruments	THS7368IPW	296-25605-5-ND	
U32	1	IC VIDEO SWITCH SPDT QD 16-TSSOP	STMicroelectronics	STMAV340TTR	497-8021-2-ND	
U33,U34	2	1 Circuit IC Switch 2:1 4Ohm SOT-23-6	STMicroelectronics	STG719STR	497-3738-2-ND	
U35,U36,U37,U38	4	IC BUS TRANSCEIVER 8BIT 20SOIC	Texas Instruments	SN74LS245DWR	296-1214-1-ND	595-SN74LS245DWR
CN8	1	120 Pos Connector Receptacle, Gold, MB-Side (Local Bus)	JAE Electronics	TX24-120R-6ST-H1E	670-1368-ND	
CN9	1	CONN RCPT 50POS VERT GOLD, MB-Side (Video Port)	JAE Electronics	TX24-50R-6ST-H1E	670-1392-ND	
CN7	1	CONN HEADER 24POS 4.2MM VERT TIN (ATX-Power)	Molex Inc	39306247	23-0039306247-ND	
CN1	1	CONN HD15 FEMALE OVER DUAL PS/2	Norcomp Inc.	999-H15-PS2L571	999-H15FA-ND	636-999-H15-PS2L571
CN2, CN3	1	CONN DB9 MALE-MALE .625" SPACING (JOY/MOUSE)	Norcomp Inc.	189-009-613R571	1009MME-ND	636-189-009-613R571
CN4	1	CONN RCA JACK MONO 3.2MM R/A (LEFT)	CUI Inc.	RCJ-043	CP-1420-ND	490-RCJ-043
CN5	1	CONN RCA JACK MONO 3.2MM R/A (RIGHT)	CUI Inc.	RCJ-042	CP-1419-ND	490-RCJ-042
CN6	1	68 Pos PCMCIA Through Hole, Right Angle Gold	TE Connectivity AMP Connectors	5535653-1	A113952-ND	
H8	1	CONN HEAD 2MM 44POS GOLD (2,5" IDE)	Sullins Connector Solutions	SBH21-NBPN-D22-ST-BK	S9025-ND	
H2	1	CONN HEADER VERT 10POS GOLD (Ser port)	On Shore Technology Inc	302-S101	ED1543-ND	
H5	1	CONN HEADER VERT 34POS GOLD (FLOPPY)	On Shore Technology Inc	302-S341	ED10528-ND	517-D2534-6002-AR
H6	1	CONN HEADER VERT 22POS 2MM (Clock Port)	Amphenol ICC (FCI)	57102-F08-11ULF	609-5095-ND	
Alternative H6		Connector Header Through Hole 44 position 0.079" (2.00mm)	Würth Elektronik	62004421121	732-62004421121-ND	
H11	1	CONN HEADER VERT 26POS 2.54MM (PAR Port)	On Shore Technology Inc.	302-S261	ED10526-ND	
H1	1	CONN RECEPT 2MM VERT AU 6POS (AVR ISP)	Harwin Inc	M22-7140342	952-1357-5-ND	855-M22-7140342
H4	1	Connector Header Through Hole 12 position 0.100" (2.54mm)	3M	961112-6404-AR	3M9457-12-ND	
Q4,Q10,Q11	3	MOSFET N-CH 30V 5A SOT23	International Rectifier	IRLML6344TRPBF	IRLML6344TRPBCT-ND	942-IRLML6344TRPBF
Q12,Q13, Q6	3	TRANS NPN 45V 0.1A SOT23-3	onsemi	BC847BLT3G	BC847BLT3GOSTR-ND	
Q1,Q2,Q3,Q5,Q9,Q14,Q15,Q16	8	TRANSISTOR PNP 500MA 45V SOT-23	Micro Commercial Co	BC807-25-TP	BC807-25-TPMSCT-ND	833-BC807-25-TP
Q7,Q8	2	RF MOSFET JFET 10V SOT23-3	onsemi	MMBFJ310LT1G	MMBFJ310LT1GOSTR-ND	
SW1	1	Dip Switch SPST 4 Pos Through Hole Slide	CTS Electrocomponents	206-4	CT2064-ND	
X2	1	4 MHz ±30ppm Crystal 20pF 120 Ohms HC-49/US	CTS-Frequency Controls	ATS040	CTX402-ND	774-ATS040
X3	1	CRYSTAL 32.768KHZ 12.5PF CYL	Abracon Corporation	AB26T-32.768KHZ	535-9032-ND	815-AB26T-32.768KHZ
X4	1	8 MHz ±30ppm Crystal 20pF 60 Ohms HC-49/US	CTS-Frequency Controls	ATS08A-E	CTX1054-ND	774-ATS08A-E
Sockets (Optional):						
U28	1	CONN IC DIP SOCKET 18POS TIN	On Shore Technology Inc.	ED18DT	ED3047-5-ND	
U14,U13	2	SOCKET IC OPEN FRAME 42POS .6"	Adam Tech	ICM-642-1-GT-HT	2057-ICM-642-1-GT-HT-ND	
Alternative U14, U13 Sockets		CONN IC DIP SOCKET 42POS TIN	3M	4842-6000-CP	4842-6000-CP-ND	
Obsolete parts:						

U1	1	MC68EC020 TQFP	Motorola			
U4	1	ALICE	MOS			
U15	1	LISA	MOS			
U6	1	AA-GAYLE	MOS			
U26,U25	2	MOS8520 PLCC44	MOS			
U24	1	MOS8364 PLCC52	MOS			
U16	1	BUDGIE 391425	MOS			
U13,U14	2	ROM	MOS			
U19	1	ADV101	Analog Devices Inc.			
U20,U21,U22,U23	4	HM514260AJ8	Hitachi Semiconductor			
U28	1	MSM6242B	OKI			
X1	1	XTAL OSCILLATOR 28.37516MHz				
XR:						
XR1 = NC (Mount to add ROM-wait)						
XR2,XR3 = Mounted (Floppy header extra functions)						
XR4 = Mounted (Lisa Wide)						
XR5 = NC (KB_Reset Pulldown)						
XR6 = NC (Mount to disable Keyboard Reset Warning)						
XR7 to XR9 configures Video Filter (Default 18MHz ,may need to be reconfigured if RTG card is to be used with internal VGA-connector)						
XR7 = Mounted						
XR8 = NC						
XR9 = Mounted						
XR10 = NC (MUST NOT BE MOUNTED, only mount if you are absolutely sure of what you are doing)						
IF U19 = VP101						
R156 = NC						
C64 = NC						
U17 = NC						
C63 = MOUNTED						
IF U19 = ADV101						
R156 = MOUNTED						
C64 = NC						
U17 = MOUNTED						
C63 = MOUNTED						
Some DACS may require C64 to be mounted						
Accessories:						
12mm distance for turbo and video cards						
Hex Standoff Threaded M3 Nylon 0.472" (12.00mm) Natural					36-25511-ND	534-25511

** Not all components are available at all suppliers.
Although a lot of effort has been put in to choose components that are as easily available as possible,
some has to be bought at a specific supplier. Most components are available at Digikey.
Some specifications may differ between the suppliers, but they should be compatible in this design.*

Component suppliers:
www.mouser.com
www.digikey.com

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