

SCG

REF	VALUE	FOOTPRINT	QTY	NOTES	DESCRIPTION	MFG	MFG PART	SUPPLIER	SUPPLIER PART
C1,C5,C9,C12-13,C22,C28-C38,C40-41	0.1uF	C2	19	Ceramic	Multilayer Ceramic Capacitors MLCC - Leaded 0.10uF 50V X7R 10%	TDK	FK28X7R1H104K	Mouser	810-FK28X7R1E104K
C3-4	33pF	C2	2	Ceramic	Multilayer Ceramic Capacitors MLCC - Leaded 33pF 50V C0G 5%	TDK	FK28C0G1H330J	Mouser	810-FK28C0G1H330J
C7,C43-45	22uF	C1V7	4	Electrolytic	Aluminum Electrolytic Capacitors - Leaded 22uF 63V	Panasonic	EEU-FC1J220	Mouser	667-EEU-FC1J220
C10,C21	270pF	C2	2	Ceramic	Multilayer Ceramic Capacitors MLCC - Leaded 270pF 50V C0G 5%	TDK	FK28C0G1H271J	Mouser	810-FK28C0G1H271J
C11,C18	10uF	C1V5	2	Tantalum / Electrolytic	Aluminum Electrolytic Capacitors - Leaded 10uF 100volts AEC-Q200	Panasonic	EEU-FC2A100	Mouser	667-EEU-FC2A100
C26-27	0.01uF	C2	2	Ceramic	Multilayer Ceramic Capacitors MLCC - Leaded 0.01uF 50volts C0G +/-5%	TDK	FK28C0G1H103J	Mouser	810-FK28C0G1H103J
C42	220uF	C1V5	1	Electrolytic	Aluminum Electrolytic Capacitors - Leaded 220uF 10V	Panasonic	EEU-FC1A221S	Mouser	667-EEU-FC1A221S
D1	LED	T 1-3/4	1	Red	LED Uni-Color Red 635nm 2-Pin T-1 3/4	Lite-On Electronics	LTL-307E-3	Jameco	2006730
J1	CONN_5X2	HDR 5X2 SHRD	1	Video Output	Connector Shrouded Header 10 Position 2.54mm Solder Straight Thru-Hole	Jameco Valuepro	7110-10SG-R	Jameco	67812
J5	CONN_5X2	HDR 5X2	1	Audio Config					
J9	CONN_5X2	HDR 5X2 SHRD	1	Audio Output	Connector Shrouded Header 10 Position 2.54mm Solder Straight Thru-Hole	Jameco Valuepro	7110-10SG-R	Jameco	67812
J18	CONN_5X2	HDR 5X2 SHRD	1	Joy A	Connector Shrouded Header 10 Position 2.54mm Solder Straight Thru-Hole	Jameco Valuepro	7110-10SG-R	Jameco	67812
J19	CONN_5X2	HDR 5X2 SHRD	1	Joy B	Connector Shrouded Header 10 Position 2.54mm Solder Straight Thru-Hole	Jameco Valuepro	7110-10SG-R	Jameco	67812
J20	CONN_5X2	HDR 5X2	1	Board ID					
J21	CONN_2X1	HDR 2X1	1	Video INT Enable					
JP1	CONN_2X1	HDR 2X1	1	TMS9918 TEST2					
L1	INDUCTOR (BEAD)	INDUCTOR_V	1	Bead Inductor	Ferrite Beads AXIAL 7000mA EMIFIL	Murata Electronics	BL01RN1A1D2B	Mouser	81-BL01RN1A1D2B
P1	COMP_VIDEO	RCA	1		RCA Phono Connectors PHONO R/A PCB JK YELLOW	Kobiconn	161-0380-E	Mouser	161-0380-E
P2	FMS6141	SOIC-8	1		Active Filters 1-Ch 4th Order Std Video Filter Driver	ON Semiconductor / Fairchild	FMS6141CSX	Mouser	512-FMS6141CSX
Q2-3	2N3904	TO92-INVERT	2		Bipolar Transistors - BJT NPN Transistor General Purpose	ON Semiconductor / Fairchild	2N3904BU	Mouser	512-2N3904BU
R1,R3-4	4.7K	R3	3		Resistor Carbon Film 4.7k Ohm 1/4 Watt 5%	Jameco Valuepro	CF1/4W472JRC	Jameco	691024
R2,R5	470	R3	2		Resistor Carbon Film 470 Ohm 1/4 Watt 5%	Jameco Valuepro	CF1/4W471JRC	Jameco	690785
R6,R24	75	R3	2		Resistor Carbon Film 75 Ohm 1/4 Watt 5% (Bag of 100)	Jameco Valuepro	CF1/4W750JRC	Jameco	690591
R7-8,R10-11	10K	R3	4		Resistor Carbon Film 10k Ohm 1/4 Watt 5%	Jameco Valuepro	CF1/4W103JRC	Jameco	691104
R13-15,R17	1K	R3	4		Resistor Carbon Film 1k Ohm 1/4 Watt 5%	Jameco Valuepro	CF1/4W102JRC	Jameco	690865
R16	0	R3	0	Wire					
R20-21	2.2K	R3	2		Resistor Carbon Film 2.2k Ohm 1/4 Watt 5%	Jameco Valuepro	CF1/4W222JRC	Jameco	690945
R25-26	1M	R3	2		Resistor Carbon Film 1.0M Ohm 1/4 Watt 5%	Jameco Valuepro	CF1/4W105JRC	Jameco	691585
RR18	4.7K	SIP-10	1	Bussed	Resistor Networks & Arrays 10pins 10Kohms Bussed	Bourns	4610M-101-103LF	Mouser	652-4610M-1LF-10K
RV9,RV12	4.7K	TRIMPOT	2		Trimmer Resistors - Through Hole 1/4"RND 5KOHMS 10% 0.5WATTS	Bourns	3329H-1-502LF	Mouser	652-3329H-1-502LF
U0	C96ABC	C96ABCMC	1		Connector DIN 41612 Pl 96 Position 2.54mm Solder Right Angle Through Hole	TE Connectivity	650947-5	Jameco	859561
U1,U5,U9	74LS574	DIP-20	3		Flip Flops Tri-State Octal	Texas Instruments	SN74ALS574BN	Mouser	595-SN74ALS574BN
U2	SRAM 32KX8	DIP-28	1		SRAM 256Kb 15ns 32K x 8 SRAM	Cypress Semiconductor	CY7C199CN-15PXC	Mouser	727-CY7C199CN-15PXC
U6	74LS174	DIP-16	1		Flip Flops Hex	Texas Instruments	SN74LS174N	Mouser	595-SN74LS174N
U7	74LS04	DIP-14	1		Inverters Hex Inv w/HV Output	Texas Instruments	SN74LS04N	Mouser	595-SN74LS04N
U8	74LS139	DIP-16	1		Encoders, Decoders, Multiplexers & Demultiplexers Dual	Texas Instruments	SN74LS139AN	Mouser	595-SN74LS139AN
U10	74LS688	DIP-20	1		Logic Comparators 8-Bit Magnitude	Texas Instruments	SN74LS688N	Mouser	595-SN74LS688N
U11	74LS02	DIP-14	1		Logic Gates Quad 2-Input	Texas Instruments	SN74LS02N	Mouser	595-SN74LS02N
U12-13	74LS244	DIP-20	2		Buffers & Line Drivers Tri-State Octal	Texas Instruments	SN74LS244N	Mouser	595-SN74LS244N
U14	74LS245	DIP-20	1		Bus Transceivers Octal Bus	Texas Instruments	SN74LS245N	Mouser	595-SN74LS245N
U15	74LS93	DIP-14	1		Counter ICs 4bit Binary	Texas Instruments	SN74LS93N	Mouser	595-SN74LS93N
U16	AY-3-8910	DIP-40	1		Programmable Sound Generator	Microchip Technology	AY-3-8910A	UTSource	AY-3-8910A
U17	74LS221	DIP-16	1		Monostable Multivibrator Dual w/Schmitt-trgr inputs	Texas Instruments	SN74LS221N	Mouser	595-SN74LS221N
U18	TMS9918	DIP-40	1		Video Display Controller	Texas Instruments	TMS9918ANL	UTSource	TMS9918ANL
X1	10.73865MHz	HC-18UV	1	32pF Parallel Resonant	Crystals 10.73863MHz 32pF 30ppm -40/85	CTS Electronic Components	MP107-E	Mouser	774-MP107-E
X2	2.0MHz	DIP-14 OSC	1		Standard Clock Oscillators DIP-14 5V 2MHz	ECS	ECS-100AX-2.0	Mouser	520-TCF200-X

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		HDR 40X1	1		Connector Unshrouded Header 40 Position 2.54mm Solder Straight Thru-Hole	Jameco Valuepro	7000-1X40SG-R	Jameco	160882
		HDR 40X2	1		Connector Unshrouded Header Male 80 Position 2.54mm Solder Straight Thru-Hole	Jameco Valuepro	7000-2X40SG-R	Jameco	117197
		DIP-14 OSC	1		Machine Tooled 4 Pin Full-Can Crystal Oscillator Socket	Jameco Valuepro	2001-2X7-4CP	Jameco	133006
		DIP-14	3		Socket IC 14 Pin Machine Tooled Low Profile 0.3 Inch Wide	Jameco Valuepro	6100-14-R	Jameco	37197
		DIP-16	3		Socket IC 16 Pin Machine Tooled Low Profile 0.3 Inch Wide	Jameco Valuepro	6100-16-R	Jameco	37402
		DIP-20	7		20-Pin Machine Tooled Low Profile IC Socket 0.3 Inch Wide	Jameco Valuepro	6100-20	Jameco	38623
		DIP-28	1		28 Pin Machine Tooled Low-Profile IC Socket 0.3 Inch Wide	Jameco Valuepro	6100-28N-R	Jameco	114412
		DIP-40	2		40-Pin Machine Tooled Low Profile IC Socket 0.6 Inch Wide	Jameco Valuepro	6100-40D	Jameco	41136

Notes:

- Install either FMS6141 or Q3, but not both