Treadmill Electronic System Parts List

ID	Name	Part No.	QTY
MCU			
Q2	6MHz Resonator w/ cap	Digikey: X904-ND	1
R1, R2	50 Ohm Resistor (1206)	Digikey: RHM49.9FCT-ND	2
R3	1.5kOhm Resistor (1206)	Digikey: RHM1.50KFRCT-ND	1
J2	USB-B PCB Connector	Digikey: WM17113-ND	1
IC2	FT232BL	Digikey: 768-1009-1-ND	1
L1	Power Indicator LED	Digikey: 67-1344-1-ND	1
R4	499 Ohm Resistor (1206)	Digikey: RHM499FCT-ND	1
J3	SPDT Switch	Digikey: 360-1012-ND	1
C3	0.1uF Capacitor (1206)	Digikey: 311-1179-1-ND	1
J1	2x3 0.1" Header Male	Digikey: S2211E-20-ND	1
R5	100kOhm Resistor (1206)	Digikey: RHM100KFRCT-ND	1
IC1	ATMega644p	Digikey: ATMEGA644P-20AU-ND	1
C1,C2	22pF Capacitor	Digikey: 311-1154-1-ND	2
Q1	20MHz Crystal	Digikey: X439-ND	1
IC6	3.3V Regulator	Digikey: 296-13424-1-ND	1
IC4, IC5	Hex Non-Inverting Schmitt Trigger	Digikey: 568-1488-5-ND	2
IC3	4-Channel || Digital-to-Analog Converter	Digikey: AD5344BRU-ND	1
J7	5x2 Screw Terminals	Digikey: 277-1359-ND	1
J4, J5	5x2 Shrouded 0.1" Pitch Male Header	Digikey: MHB10K-ND	2
J8, J9	2x1 0.1" Pitch Male Header	Digikey: A26513-40-ND	2
J8, J9	0.1" Jumper	Digikey: S9000-ND	2
J6	6x1 0.1" Pitch Male Header R/A	Digikey: A32704-40-ND	1
R6, R7	500 Ohm Resistor (1206)	Digikey: RHM499FCT-ND	1
Camera (2x per system)			
IC1	Enhance Professional Gaming LaserStream Sens	Avnet: ADNK-6090	1
Q1	24.0 MHz Crystal Oscillator	Digikey: 535-9372-1-ND	1
J1	5x2 0.1" Pitch Male Header	Digikey: S2211E-20-ND	1
R2	18.7kOhm (for 2A Laser) Resistor (1206)	Digikey: RHM18.7KFCT-ND	1
R2	or 12.7 kOhm (for 3A Laser) Resistor (1206)	Digikey: RHM12.7KFRCT-ND	1
C3, C2	0.1uF Capacitor (1206)	Digikey: 445-4008-1-ND	2
C1	2.2uF Capacitor (1206)	Digikey: PCC1931CT-ND	1
R1	2.7kOhm Resistor (1206)	Digikey: RHM2.70KFCT-ND	1
T1	PNP Bipolar Junction Transistor	Digikey: 2N4402-ND	1
C4	470pF Capacitor (1206)	Digikey: 311-1167-1-ND	1
Cable Assembly (2x per system)			
	2x5 0.1" Female Socket w/ Tab	Digikey: MKC10K-ND	2
	length of 10 conductor Ribbon Cable	Digikey: MB10R-100-ND	1
Other Parts			
	AVR ISP MKII In System Programmer	ATAVRISP2-ND	1