Bourer Circuiter														
Power Circuitry														
Part LM3940IT-3.3	Description	Quantity	Package	Digi-Key # LM3940IT-3.3	Price (1)	Notes Need low temperature. Else: 497-1491-5	Eagle							
LM394011-3.3 /NOPB	Low-Dropout 3.3V Voltage Regulator		1 Through-Hole	/NOPB-ND	1	Need low temperature. Else: 497-1491-5 ND (0.61))-							
	0.47uF Capacitor		1 Surface Mount	445-1320-1-ND										
	22uF Capacitor USB female		1 Surface Mount	445-8028-1-ND		22-33 (marked as 33 on board)								
	connector		1 Surface Mount											
	Low-Dropout 5V													
	Voltage Regulator Female Header		1 Through-Hole			Optional								
A26228-ND	Jumper		2 Through-Hole	A26228-ND	0.1	57 Must purchase in quantity of 10								
ADC														
Part	Description	Quantity	Package	Digi-Key#	Price (1)	Notes	Eagle							
	10 bit Analog to													
MCP3008-I/SL	Digital Converter 22K Ohm Resistor		1 Surface Mount	MCP3008-I/SL-ND		63	R0603							
	33K Ohm Resistor			P33KGCT-ND		0.1	R0603							
ECG Electrode Sensor														
Sensor														
Part	Description	Quantity	Package	Digi-Key#	Price (1)	Notes								
	NPN Transistor		1 Through-Hole	2N3904D26ZCT- ND		19								
	47K Ohm Resistor		1 Surface Mount	P47KGCT-ND		0.1	R0603	+		+	1			
	100K Ohm													
	Resistor Terminal Blocks		1 Surface Mount	P100KGCT-ND		0.1	R0603			-	-			
Status /Guide	Common DIUCKS		_											
Lights					1									
Part	Description	Quantity	Package	Digi-Key#	Price (1)	Notes	Eagle							
						Notes (Could use different combo of LED and resistor)	Body: 3.16mm x	Pad edges: 4mm x						
	Green LED 470 Ohm Resistor		2 Surface Mount 2 Surface Mount	Ebay P470GCT-ND	cheap	resistor)	1.57mm R0603	2.5mm	Pad-width: 0.5mm		-			
	470 Onm Resistor		2 Surface Mount	P470GCT-ND		J.1	R0603							
ECG Circuit														
Dort	Description	Quantity	Dookogo	Dial Kov #	Drine (1)	Notes	Engle							
Part	Description Instrumentation	Quantity	Package	Digi-Key#	Price (1)	Notes	Eagle				-			
	Instrumentation Amplifier		1 Surface Mount	INA321EACT-ND		24								
OPA4340UA	Quad Op-Amp		1 Surface Mount	OPA4340UA-ND	6.	94 All resistors have huge price break for								
	47K Ohm Resistor		3 Surface Mount	P47KGCT-ND		0.1 bigger quantities	R0603							
	100K Ohm Resistor													
	Resistor 2.2M Ohm			P100KGCT-ND		0.1	R0603							
	Resistor		2 Surface Mount	P2.2MGCT-ND		0.1	R0603							
	1M Ohm Resistor 3.3K Ohm Resistor		3 Surface Mount 1 Surface Mount	P1.0MGCT-ND P3.3KGCT-ND		0.1	R0603 R0603	-		-	-			
	820 Ohm Resistor		1 Surface Mount	P820GCT-ND		0.1	R0603							
	4.7K Ohm Resistor		1 Surface Mount	P4.7KGCT-ND		0.1	R0603							
	0.1uF Capacitor		4 Surface Mount	445-1316-1-ND		0.1	C0603							
	4.7nF Capacitor 1uF Capactior		1 Surface Mount 1 Surface Mount	399-9092-1-ND 445-1321-1-ND		D.1 D.1	C0603 C0603							
	.u. Capacioi		. Carace would		· '		55000							
Scale Circuit														
Dort	Descriptio -	Oventity	Dookoor	Dial Key #	Drine (4)	Notes	Eagle							
	Description	Quantity	Package	Digi-Key # MCP6004-E/SL-	Price (1)	Notes	Eagle							
MCP6004-E/SL	Quad Op-Amp		1 Surface Mount	ND	0.	65	14SOIC							
MCP6L02T-E/SN	Dual On-Amp		1 Surface Mount	MCP6L02T- E/SNCT-ND	n	42	8SOIC							
	100K Ohm													
	Resistor 100 Ohm Resistor		8 Surface Mount 5 Surface Mount	P100KGCT-ND P100GCT-ND		0.1	R0603 R0603							
	100 Onn Resistor		o our lace Mount	I IUUGCI-ND	†	A. I	R0603	+		+	+			
IR Temp Circuit														
Part	Description	Quantity	Package	Digi-Key #	Price (1)	Notes								
				Digi-Key# MLX90614ESF-										
	IR Temp sensor		1 Through-hole	BAA-000-TU	12.	49	00000							
	0.1uF Capacitor 4.7K Ohm Resistor		1 Surface Mount 2 Surface Mount	445-1316-1-ND P4.7KGCT-ND		0.1	C0603 R0603							
	Cilili Resistor		L Gui lace MUUIII	. 4./NGC1-ND	· '									
Screw Terminals														
	Description 2 pin screw	Quantity	Package	Digi-Key#	Price (1)	Notes								
1776275-2	terminals		5	A98036-ND										
	3 pin screw													
	terminals 4 pin screw		1	A98037-ND										
	terminals		2	A98038-ND										
Pin Expansion														
Options														
Part	Description Output obiff	Analog / Digital	# Pins (got/given)	Digi-Key #	Price (1)	Notes								
74HC595PW	Output shift registers	Digital	8 / 4	568-2263-1-ND	0.	59 latched, daisy-chainable								
CD74HC194	Input shift registers	Digital	8/3	296-12794-1-ND MCP23S17-E/SO-	0.	64 daisy-chainable								
		Digital	16 / SPI	MCP23S17-E/SO- ND		51 This is what is used on the shield								
WIOFZ331/	n O exhausiou	Piglidi	10 / 3F1	IND	1.	JI I I I I I I I I I I I I I I I I I I								