TICKER Wiring Chart Copyright 2023, Robert Heeter

LED MATRIX LEFT COLUMN PIN	WIRE	LEVEL SHIFTI #1 PIN	ER	COMMENTS	LEVEL SHIFTER #1 PIN	WIRE	POCKET BEAG	_	COMMENTS	
R1		B8		Red signal 1	A8		GPIO 57	P2.6	Red signal 1	
B1		B7		Blue signal 1	A7		GPIO 59	P2.2	Blue signal 1	L
R2		В6		Red signal 2	A6		GPIO 20	P1.20	Red signal 2; note this is on P1	
B2		B5		Blue signal 2	A5		GPIO 23	P2.3	Blue signal 2	
A		B4		Select A	A4		GPIO 44	P2.24	Select A	
С		B3		Select C	A3		GPIO 46	P2.22	Select C	
CLK		B2		Clock	A2		GPI0 52	P2.10	Clock	
OE		B1		Output enable	A1		GPIO 50	P2.1	Output enable	
-	_	VA		Voltage A; no conn to LED MATRIX	VA		3.3V	P2.23	Voltage A; conn via rail	
-	_	OE		Output enable; no conn to LED MATRIX	OE		3.3V	P2.23	Output enable; conn to LEVEL SHIFTER #1 VA	
-	-	VB		Voltage B; no conn to LED MATRIX	VB		VOUT (5V)	P2.13	Voltage B; conn via rail	
-	-	GND		Ground; no conn to LED MATRIX	GND		GND	P2.15	Ground; conn via rail	
LED MATRIX RIGHT COLUMN PIN	WIRE	LEVEL SHIFTI #2 PIN	ER	COMMENTS	LEVEL SHIFTER #2 PIN	WIRE	POCKET BEAG	ile	COMMENTS	
G1		B8		Green signal 1	A8		GPIO 58	P2.4	Green signal 1	
GND		GND		Ground; conn via rail	-	-	-	-	No conn	
G2		B6		Green signal 2	A6		GPIO 26	P1.34	Green signal 2; note this is on P1	
GND		GND		Ground; conn via rail	-	-	-	-	No conn	
В		B4		Select B	A4		GPIO 45	P2.33	Select B	
D		В3		Select D	А3		GPIO 47	P2.18	Select D	
LAT		B2		Latch	A2		GPIO 60	P2.8	Latch	
GND		GND		Ground; conn via rail	-	-	-	-	No conn	
-	-	VA		Voltage A; no conn to LED MATRIX	VA		3.3V	P2.23	Voltage A; conn via rail	
-	-	OE		Output enable; no conn to LED MATRIX	OE		3.3V	P2.23	Output enable; conn to LEVEL SHIFTER #2 VA	
-	-	VB		Voltage B; no conn to LED MATRIX	VB		VOUT (5V)	P2.13	Voltage B; conn via rail	
_	_	GND		Ground; conn to LED MATRIX GND pins via rail	GND		GND	P2.15	Ground; conn via rail	-
		GIND		or ourid; comit to LED TINTINIA did pens ved rate	GND		UND	PZ.13	or ound, commercial via ract	
USB BREAKOUT PIN	WIRE COLOR	POCKET BEAGI	LE	COMMENTS	POWER SOURCE PIN	WIRE	POCKET BEAU LED MATRIX	GLE PIN OR	COMMENTS	
	WIRE COLOR	POCKET BEAG	LE P1.7		POWER SOURCE	WIRE	POCKET BEAG	GLE PIN OR	COMMENTS Input voltage; conn from 5V/4A DC adapter to	
PIN	WIRE COLOR	POCKET BEAGI		COMMENTS	POWER SOURCE PIN	WIRE	POCKET BEAG LED MATRIX	GLE PIN OR PIN	COMMENTS	
PIN VCC	WIRE COLOR	POCKET BEAGI PIN VIN (5V)	P1.7	COMMENTS Input voltage	POWER SOURCE PIN	WIRE	POCKET BEAG LED MATRIX	GLE PIN OR PIN	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to	
PIN VCC D-	WIRE COLOR	POCKET BEAGI PIN VIN (5V) DN	P1.7 P1.9	COMMENTS Input voltage Negative data	POWER SOURCE PIN 5V	WIRE	POCKET BEAG LED MATRIX VIN (5V)	GLE PIN OR PIN	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT	
PIN VCC D- D+	WIRE COLOR	POCKET BEAGI PIN VIN (5V) DN DP GND ID	P1.7 P1.9 P1.11 P1.15 P1.13	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder)	POWER SOURCE PIN 5V	WIRE	POCKET BEAG LED MATRIX VIN (5V)	GLE PIN OR PIN	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on	
PIN VCC D- D+	WIRE COLOR	POCKET BEAGI PIN VIN (5V) DN DP GND	P1.7 P1.9 P1.11 P1.15	COMMENTS Input voltage Negative data Positive data Ground	POWER SOURCE PIN 5V 5V GND	WIRE	POCKET BEALLED MATRIX VIN (5V) VCC GND	GLE PIN OR PIN P1.7	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT	
PIN VCC D- D+	WIRE COLOR	POCKET BEAGI PIN VIN (5V) DN DP GND ID	P1.7 P1.9 P1.11 P1.15 P1.13	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder)	POWER SOURCE PIN 5V 5V	WIRE	POCKET BEAL LED MATRIX VIN (5V)	GLE PIN OR PIN P1.7	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on	
PIN VCC D- D+	WIRE COLOR	POCKET BEAGI PIN VIN (5V) DN DP GND ID	P1.7 P1.9 P1.11 P1.15 P1.13	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder)	POWER SOURCE PIN 5V 5V GND	WIRE	POCKET BEALLED MATRIX VIN (5V) VCC GND	GLE PIN OR PIN P1.7	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT	
PIN VCC D- D+ GND		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder)	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID	WIRE COLOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEAC	GLE PIN OR PIN P1.7	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on	
PIN VCC D- D+ GND - - BUTTON PIN		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder)	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN		POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN	P1.7 P1.7 P1.15	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS	
PIN VCC D- D+ GND BUTTON PIN 1+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) COMMENTS Conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN	WIRE COLOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V	P1.15 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1-		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) COMMENTS Conn via rail Ground; conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND	P1.7 P1.7 P1.15 P1.16	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1- 1-		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<"	POWER SOURCE PIN 5V 5V GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL	WIRE COLOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V	F1.15 P1.15 P1.16 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground	
PIN VCC D- D+ GND - - 1+ 1- 1- 2+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) COMMENTS Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEACH PIN 3.3V GND 3.3V I2C2	FILE PIN OR PIN P1.7 P1.7 P1.15 GLE P1.14 P1.16 P1.14 P1.28	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard	
PIN VCC D- D+ GND - - 1+ 1- 1- 2+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail	POWER SOURCE PIN 5V 5V GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SDA	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V	F1.15 P1.15 P1.16 P1.14 P1.16 P1.14 P1.16 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard	
PIN VCC D- D+ GND - - 1 1- 1- 2+ 2- 2-		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 LE P2.23 P2.21 P1.2 P2.23 P2.21 P1.4	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•"	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEACH PIN 3.3V GND 3.3V I2C2	FILE PIN OR PIN P1.7 P1.7 P1.15 GLE P1.14 P1.16 P1.14 P1.28	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.2 P2.23 P2.21 P1.4 P2.23	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) COMMENTS Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail	POWER SOURCE PIN 5V 5V GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SDA SDA	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V	F1.15 P1.15 P1.16 P1.14 P1.16 P1.14 P1.16 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.4 P2.23 P2.21	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail Ground; conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SCL SDA SDA KEY	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V	F1.15 P1.15 P1.16 P1.14 P1.16 P1.14 P1.16 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND GPIO 5	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.4 P2.23 P2.21 P1.4 P2.23 P2.21	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail Ground; conn via rail Widget cycling forward button ">"	POWER SOURCE PIN 5V 5V GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SDA SDA	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V	F1.15 P1.15 P1.16 P1.14 P1.16 P1.14 P1.16 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard	
PIN VCC D- D+ GND - - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+ 3- 3- 4+	WIRE COLOR OR RESISTOR 1k 1k	POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND GPIO 5 3.3V	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 LE P2.23 P2.21 P1.4 P2.23 P2.21 P1.6 P2.23	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Action button "•" Conn via rail Ground; conn via rail Midget cycling forward button ">" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SCL SDA SDA SDA KEY Conn	WIRE COLOR OR RESISTOR	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V	F1.15 P1.15 P1.16 P1.14 P1.16 P1.14 P1.16 P1.14	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard	
PIN VCC D- D+ GND - - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+ 3- 3- 4+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND GPIO 5 3.3V GND GPIO 5 3.3V GND	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.4 P2.23 P2.21 P1.6 P2.23 P2.21	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) COMMENTS Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SCL SDA SDA SDA KEY Conn	WIRE COLOR OR RESISTOR 1k 1k "Connected"	POCKET BEALLED MATRIX VIN (5V) VCC GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V I2C2	FILE PIN OR PIN P1.7 P1.7 P1.15 F1.14 P1.16 P1.14 P1.28 P1.14 P1.28	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard Serial data; conn via breadboard	
PIN VCC D- D+ GND - - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+ 3- 3- 4+	WIRE COLOR OR RESISTOR 1k 1k	POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND GPIO 5 3.3V GND GPIO 5 3.3V GND GPIO 2	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.4 P2.23 P2.21 P1.6 P2.23 P2.21 P1.6 P2.23 P2.21	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail Brightness decrease button "-"	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SCL SDA SDA SDA KEY Conn NOTES Be careful about the w LEVEL SHIFTERS should	WIRE COLOR OR RESISTOR 1k 1k "Connected" iring for the LE correspond acros	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V I2C2 D MATRIX and B pir	P1.15 P1.15 P1.15 P1.16 P1.14 P1.28 P1.14 P1.26 P1.2	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard Serial data; conn via breadboard	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+ 3- 3- 4+ 4- 4- 5+		POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND GPIO 5 3.3V GND GPIO 2 3.3V	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.4 P2.23 P2.21 P1.6 P2.23 P2.21 P1.6 P2.23 P2.21	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail Brightness decrease button "-" Conn via rail	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SCL SDA SDA KEY Conn NOTES Be careful about the w LEVEL SHIFTERs should SHIFTER 1 pin B8, whice	WIRE COLOR OR RESISTOR 1k 1k "Connected" iring for the LE correspond acros h internally con	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V I2C2	P1.15 P1.15 P1.16 P1.14 P1.28 P1.14 P1.26 P1.14 P1.26	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard Serial data; conn via breadboard in the upright orientation. The wiring for the e, the LED MATRIX pin R1 connects to LEVEL in A8, which then connects to POCKET BEAGLE	
PIN VCC D- D+ GND - - BUTTON PIN 1+ 1- 1- 2+ 2- 2- 3+ 3- 3- 4+ 4- 4- 5+	WIRE COLOR OR RESISTOR 1k 1k	POCKET BEAGIPIN VIN (5V) DN DP GND ID VBUS POCKET BEAGIPIN 3.3V GND GPIO 87 3.3V GND GPIO 89 3.3V GND GPIO 5 3.3V GND GPIO 5 3.3V GND GPIO 2	P1.7 P1.9 P1.11 P1.15 P1.13 P1.5 P1.2 P2.23 P2.21 P1.4 P2.23 P2.21 P1.6 P2.23 P2.21 P1.6 P2.23 P2.21	COMMENTS Input voltage Negative data Positive data Ground Conn to POCKET BEAGLE GND pin (i.e., solder) Conn to POCKET BEAGLE VIN pin (i.e., solder) Conn via rail Ground; conn via rail Widget cycling backward button "<" Conn via rail Ground; conn via rail Action button "•" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail Widget cycling forward button ">" Conn via rail Ground; conn via rail Brightness decrease button "-"	POWER SOURCE PIN 5V 5V GND GND AHT10 TEMP/HUMID SENSOR PIN VIN GND SCL SCL SCL SDA SDA KEY Conn NOTES Be careful about the w LEVEL SHIFTERS should SHIFTER 1 pin B8, whic pin P2.6 (GPIO 57). Se	WIRE COLOR OR RESISTOR 1k 1k "Connected" iring for the LE correspond acros h internally con e the documentat	POCKET BEALLED MATRIX VIN (5V) VCC GND GND POCKET BEALPIN 3.3V GND 3.3V I2C2 3.3V I2C2 D MATRIX and B pirects to LEVE ion for wirin	P1.15 P1.15 P1.16 P1.14 P1.28 P1.14 P1.26 P1.19	COMMENTS Input voltage; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via VCC on USB BREAKOUT Input voltage; conn from 5V/4A DC adapter to VCC on LED MATRIX power pins Ground; conn from 5V/4A DC adapter to VIN on POCKET BEAGLE via GND on USB BREAKOUT Ground; conn from 5V/4A DC adapter to GND on LED MATRIX power pins COMMENTS Input voltage; conn via breadboard Ground Serial clock; conn via breadboard Serial data; conn via breadboard	