

Weather Station Raspberry Pi / ADS1115 / LM393 Cabling

Johann Wiesheu, May 2023

rPi-Pin	Function	Target	target pin	direction	color		rPi-Pin	Function	Target	target pin	color	
1	3.3V	VCC ADS1115 + OLED	1	out		<div>PI Model B/B+</div> <div>PI Model B+</div>	5V	AUX reserve				
2												
3	SDA	I2C ADS1115 / SSD1106	4 / 1	bus	yellow							
4												
5	SCL	I2C ADS1115 / SSD1106	3 / 2	bus	green							
6												
7												
8												
9	Attention, irradiation from I2C bus!											
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25	Ground	Radio	sleeve									
26												
27												
28												
29	GPIOS	MOSFET (control)	1	out	brown							
30												
31	GPIOS	433RF Transmitter		out	green							
32												
33	GPIOS	run LED green			blue							
34												
35	GPIOS	Shutdown-Button		out high	red							
36												
37	GPIOS	Traffic-Light active - control LED yellow		out	blue							
38												
39	Ground	Traffic-Light active - control LED yellow			black							
40												

Power @ expansion Board

VCC 5V433 RF RX + TX + FA

Ground433 RF RX + TX + FA

Groundall LED, Shutdown Sw

Ground	ADS1115 + OLED	2 / 1	black
Ground	ADS1115 Signal	8 - 10	black
Ground	MOSFET control	2	black
GPIOS	433RF Receiver	in	green
Ground	MOSFET / PTT (load	4	
GPIOS	LM393 (digital IN)		
GPIOS	PTT active - control LED bl	out	blue

analog IN:

Power @ expansion Board			
VCC 5V	433 RF RX + TX + FAN	red	
Ground	433 RF RX + TX + FAN	black	
Ground	all LED, Shutdown Switch, AUX		

analog IN:

Audio L	rPi speaker		out	white	----->	----->	----->	----->	Radio MIC	in	Ring 2	white
TRRS	Radio speaker	Tip	out	yellow	----->	----->	----->	----->	ADS1115	A0	7	yellow
TRRS	Radio Ring 1 PTT	Ring 1	short w gnd	blue	<-----	<-----	<-----	<-----	MOSFET	load	3	
TRRS	Radio Ring 2 MIC	Ring 2	in	white								
TRRS	Radio ground	Sleeve	Gnd	black	<-----	<-----	<-----	<-----	MOSFET	load gnd	4	

digital IN:

Audio L	rPi speaker		out	white	----->	----->	----->	----->	Radio MIC	in	Ring 2	white
TRRS	LM393 d-out	Tip	out	yellow	----->	----->	----->	----->	digital IN	GPIOS	38	yellow
TRRS	Radio Ring 1 PTT	Ring 1	short w gnd	blue	<-----	<-----	<-----	<-----	MOSFET	load	3	
TRRS	Radio Ring 2 MIC	Ring 2	in	white								
TRRS	Radio ground	Sleeve	Gnd	black	<-----	<-----	<-----	<-----	MOSFET	load gnd	4	