SPI Pullups

3V3

R? 4.7k
R? 4.7k

I2C0_SCL
I2C0_SDA

U1 — Pico (Raspberry Pi Pico)

Pin	Label		Label	Pin
21	GPIO16	SWDIO GND SWCLK (42 43 44)	GPIO15	20
22	GPIO17		GPIO14	19
23	GND		GND	18
24	GPIO18		GPIO13	17
25	GPIO19		GPIO12	16
26	GPIO20		GPIO11	15
27	GPIO21		GPIO10	14
28	GND		GND	13
29	GPIO22		GPIO9	12
30	RUN		GPIO8	11
31	GPIO26_ADC0		GPIO7	10
32	GPIO27_ADC1		GPIO6	9
33	AGND		GND	8
34	GPIO28_ADC2		GPIO5	7
35	ADC_VREF		GPIO4	6
36	3V3		GPIO3	5
37	3V3_EN		GPIO2	4
38	GND		GND	3
39	VSYS		GPIO1	2
40	VBUS		GPIO0	1

GND (18), SPI1_CS (17), SPI1_RX (16), SPI1_TX (15), SPI1_CK (14), GND (13), UART1_RX (12), UART1_TX (11), GND (8), I2C0_SCL (7), I2C0_SDA (6), GND (3)

GND (23), GND (28), GND (38), 3V3 (36)

U2 — SD_CARD

Pin	Label	Net
6	GND	GND
5	MISO	SPI1_RX
4	CLK	SPI1_CK
3	MOSI	SPI1_TX
2	CS	SPI1_CS
1	3V3	3V3

U4 — GPS

Pin	Label	Net
5	VCC	3V3
4	GND	GND
3	TX	UART1_RX
2	RX	UART1_TX
1	PPS	

U3 — MPU6050

Pin	Label	Net
8	INT	
7	ADO	
6	XCL	
5	XDA	
4	SDA	I2C0_SDA
3	SCL	I2C0_SCL
2	GND	GND
1	VCC	3V3

U5 — COMPASS

Pin	Label	Net
1	VCC	3V3
2	GND	GND
3	SCL	I2C0_SCL
4	SDA	I2C0_SDA
5	DRDY	

I2C devices

NOTE: originally conceived to record acceleration and gyro readings whilst travelling along a road but can be modified to use other I2C devices, as long as the code is altered.