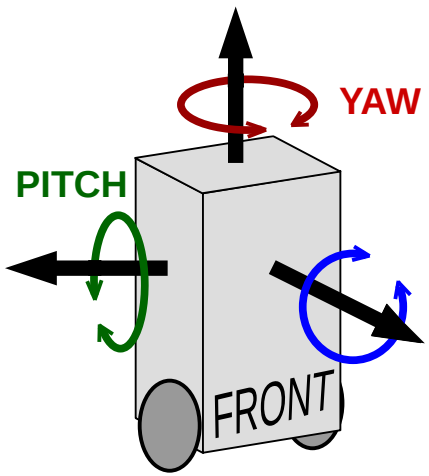
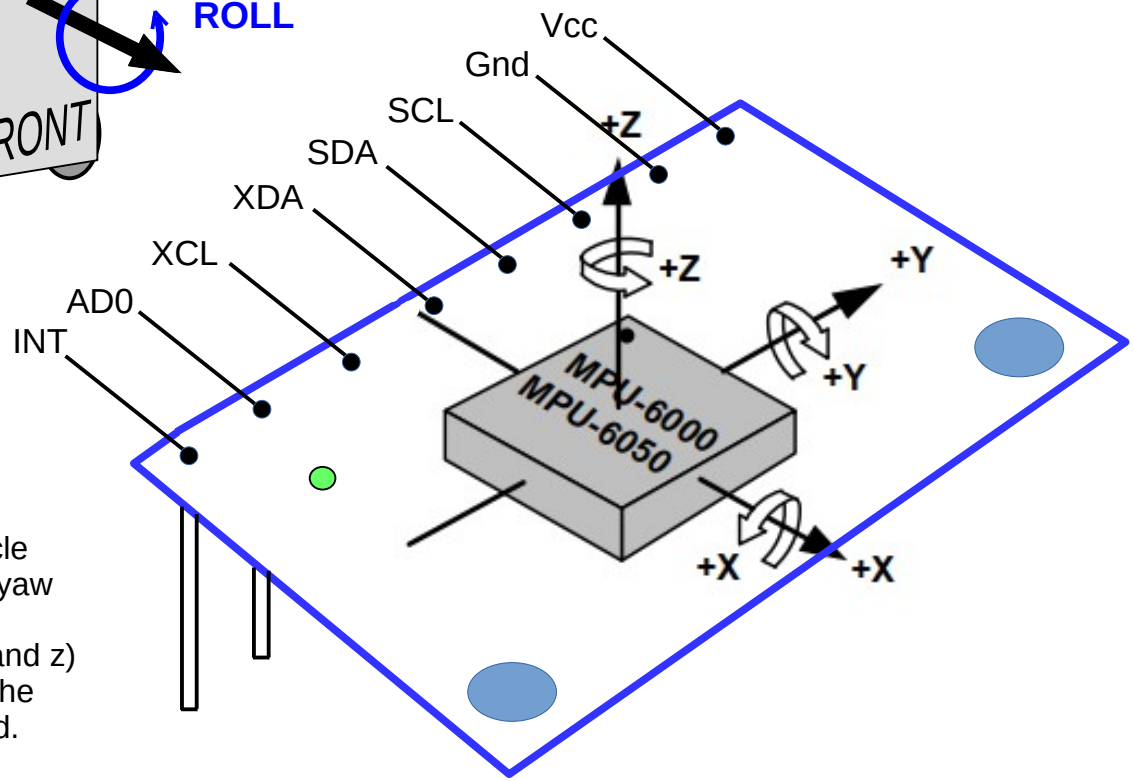
GY-521 Board
Using MPU6050 Sensor





The relationship between the vehicle directions, (pitch, yaw and roll) and the sensor axes (x,y and z) depends on how the GY521 is mounted.

TWIPi version	Direc'n	Sensor axis	Vehicle axis
SB6	up	-X	Yaw
SB6	left	+Y	Pitch
SB6	front	+Z	Roll
SB7	up	+Y	Yaw
SB7	left	-X	Pitch
SB7	front	-Z	Roll

Decimal	Hex	Register
13-16	0D+	SELF_TEST_?
15	19	SMPLRT_DIV
26	1A	CONFIG
27	1B	GYRO_CONFIG
28	1C	ACCEL_CONFIG
35	23	FIFO_EN
36	24	I2C_MST_CTRL
37-53	25+	I2C-SLAVE info
54	36	I2C_MST_STATUS
55	37	INT_PIN_CFG
56	38	INT_ENABLE
58	3A	INT_STATUS
59	3B	ACCEL_XOUT_H
60	3C	ACCEL_XOUT_L
61	3D	ACCEL_YOUT_H
62	3E	ACCEL_YOUT_L
63	3F	ACCEL_ZOUT_H
64	40	ACCEL_ZOUT_L
65	41	TEMP_OUT_H
66	42	TEMP_OUT_L
67	43	GYRO_XOUT_H
68	44	GYRO_XOUT_L
69	45	GYRO_YOUT_H
70	46	GYRO_YOUT_L
71	47	GYRO_ZOUT_H
72	48	GYRO_ZOUT_L
73-96	49+	EXT_SENS_DATA
99-102	63+	I2C Slave Data Out
103	67+	I2C_MST_DELAY_CTRL
117	75	WHO_AM_I

Accelerometer

-measures acceleration along an axis
  -the black straight arrows in diagram
-measures acceleration due to gravity or to movement
-output is a multiplier for "G"

Gyroscope

-measures rotational velocity
  -the white ribbon arrows in diagram
-uses MEMS technology & Coriolis effect
-output is in degrees per second