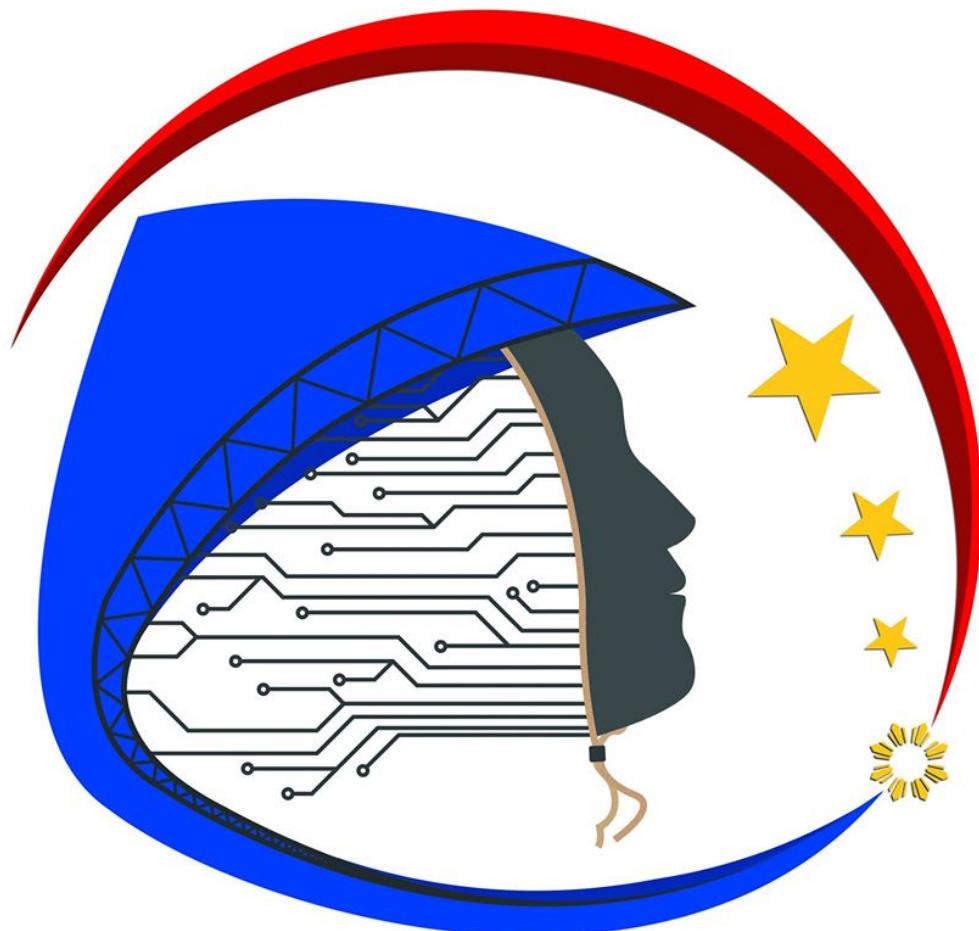
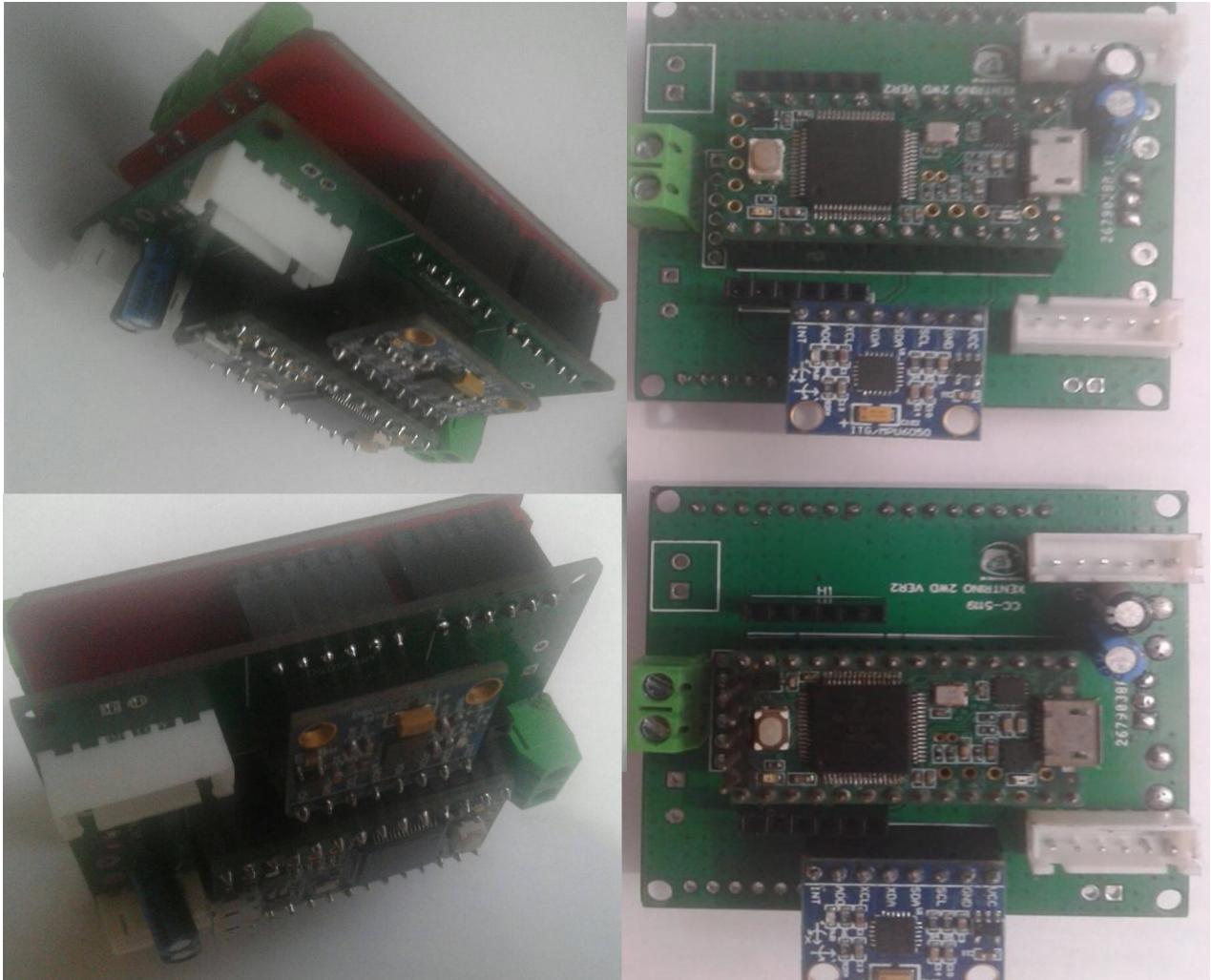


XENTRINOBOT BOARDS
2 WD Version



Hi-Techno Barrio

Distributed by:
[Xentrino Tech](#)



DESCRIPTIONS:

Xenrtrinobot Board is suitably design to drive wheeled mobile robots. The board contains a complete electronic modules that can be used to program and control robots. The 2WD version include microcontroller, inertial measurement unit sensors (IMU) and motor controller. There are extra IOs pins included in the header port which can be used as external interface , i,e LCD,LDR, relays and etc.

The board was developed as an all in one electronic module , the purpose of a compact dauther board is to avoid time consuming messy circuits. Hence, this supports as a controller board for the hobbyists, enthusiast to build mobile robots as quick as possible. Ultimately the purpose is to involved roboticist in the academe, research and development sectors in the application of Robotic Operating System.

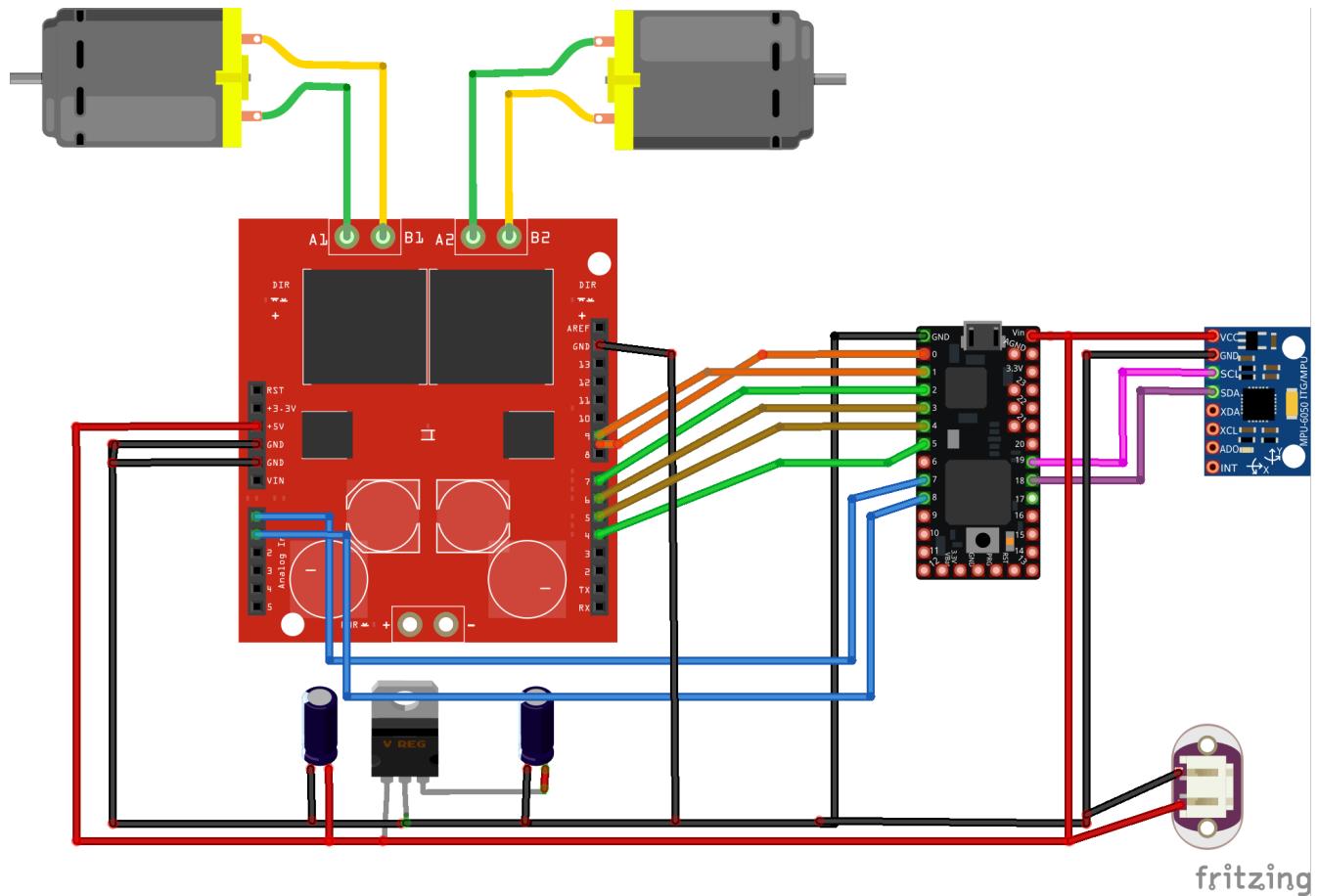
The board define the means of simplifying difficulty in the hardware setup experienced by benthusiast who want to build robots using ROS. Also the selected electronic modules are readily and locally available and the selected hardware is cost effective.

FEATURES:

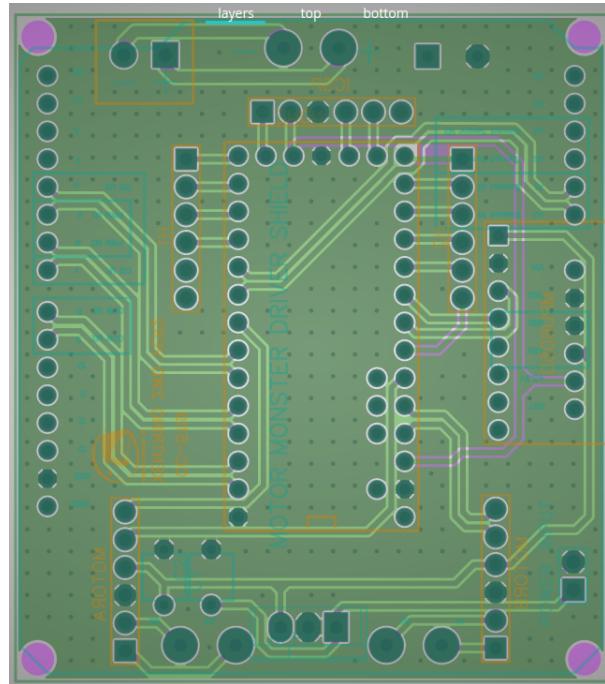
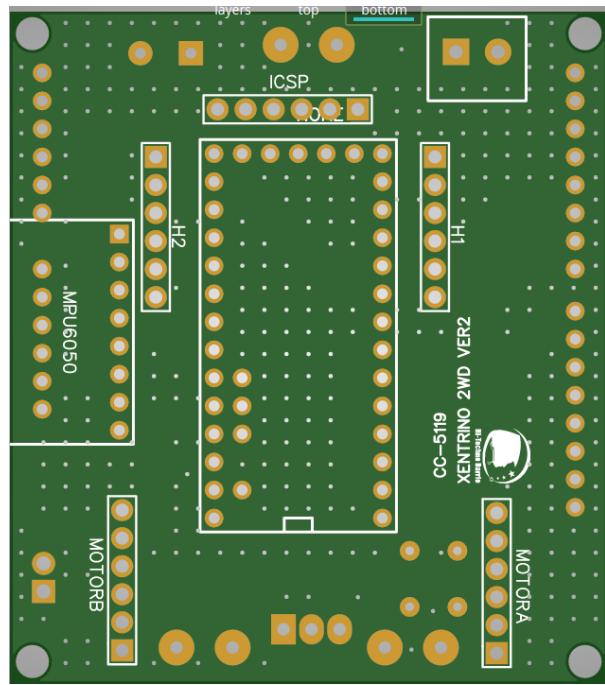
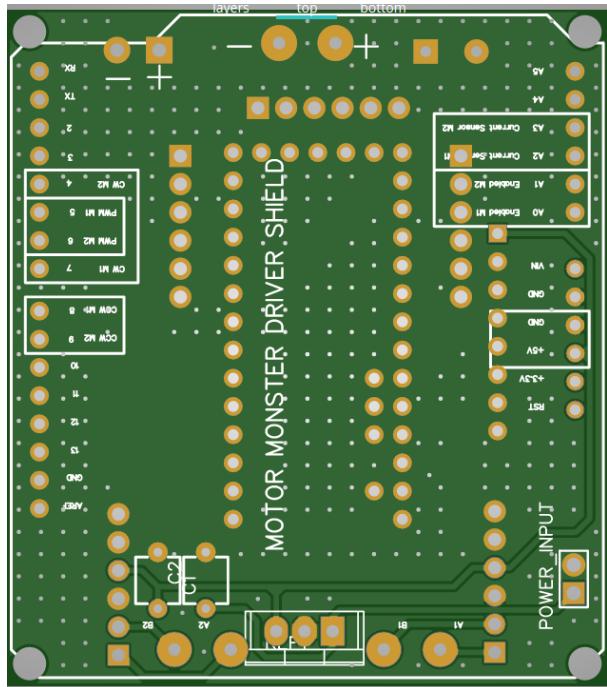
- Teensy 3.20
- Monster Moto Shield
- MPU6050/GY-85

DOCUMENTATIONS:

Schematic

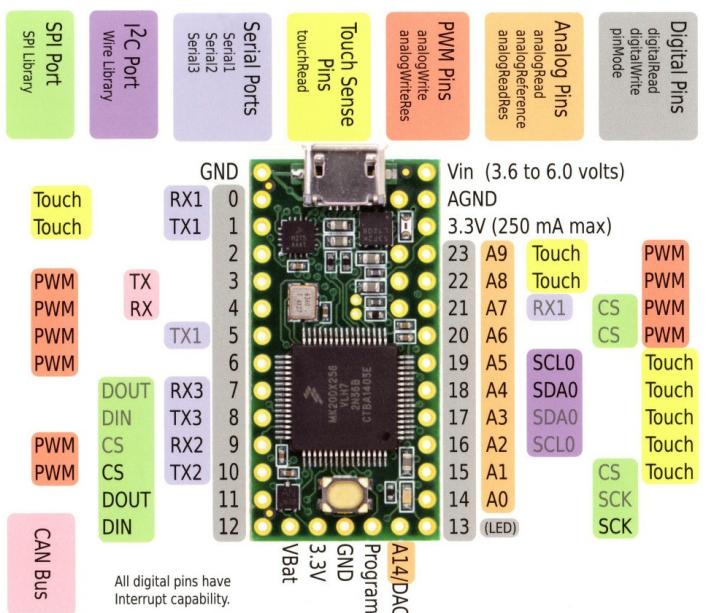


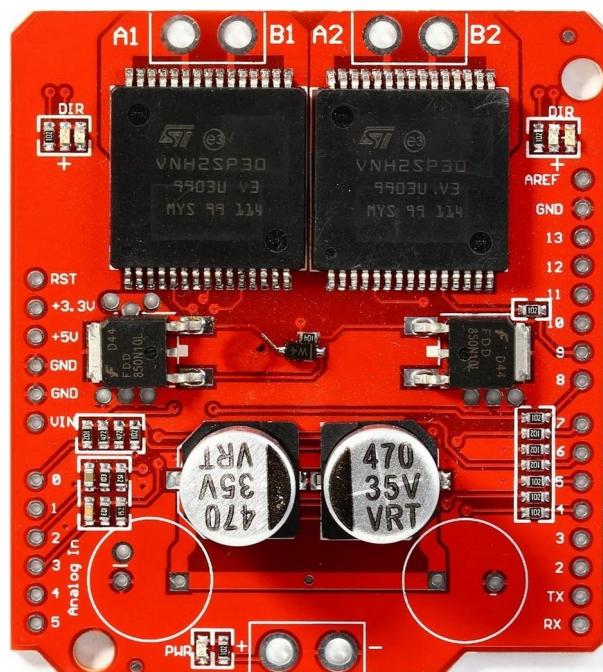
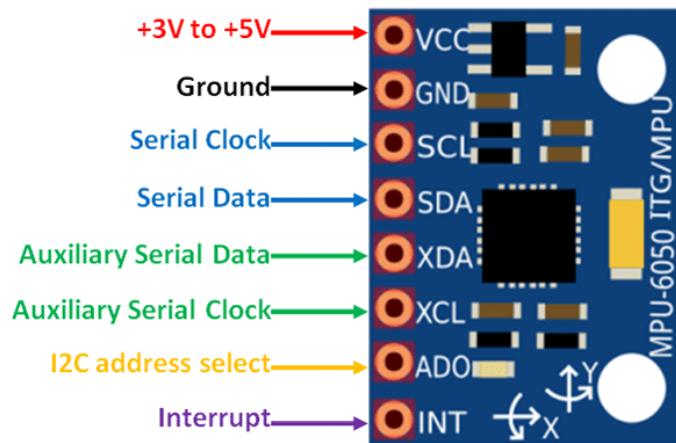
Gerber Block Diagram



Graphical Datasheet

Pin	Description	ENC1	ENC2	DUAL-1	MPU6050	Header-1
3.20	GND	GND				
	RESET					MOTOR-1
	D0					M1 M2 GND VCC ENC1 ENC2
	D1					
	D2		P_1			MOTOR-2
	D3		P_2			M3 M4 GND VCC ENC3 ENC4
	D4		EN			
	D5	ENC1				
	D6	ENC2				
	D7	ENC3				MPU6050
	D8	ENC4				VCC GND SCL SDA
	D9		IA			
	D10			SCA		HEADER -2
	D11			SDA		VCC GND 3V3 VIN D1 D0
	D12		IB			
	D13		ZA			
	D14		BB			
	A0				1	HEADER -1
	A1				2	A0 A1 A2 A3 A4 A5
	A2				3	
	A3				4	
	A4				5	
	A5				6	
	3V3					
	AREF					
	GND					
	VIN					
MOTOR1			M1			
			M2			
MOTOR2			M3			
			M4			





No.	Colour	Description
VCC	Red	Power Supply
GND	Black	Ground
A0	Orange	Enable for motor 1
A1	Black	Enable for motor 2
A2	Purple	Current sensor for motor 1
A3	Yellow	Current sensor for motor 2
D7	Cyan	Clockwise for motor 1
D8	Light Blue	Counterclockwise for motor 1
D4	Green	Clockwise for motor 2
D9	Dark Blue	Counterclockwise for motor 2
D5	Dark Blue	PWM for motor 1
D6	Khaki	PWM for motor 2

Datasheet

Monster Moto
MPU6050
Teensy 3.20

GitHub:
<https://github.com/hi-techno-barrio/XentrinoBot-BOARD>

APPLICATION SETUP

