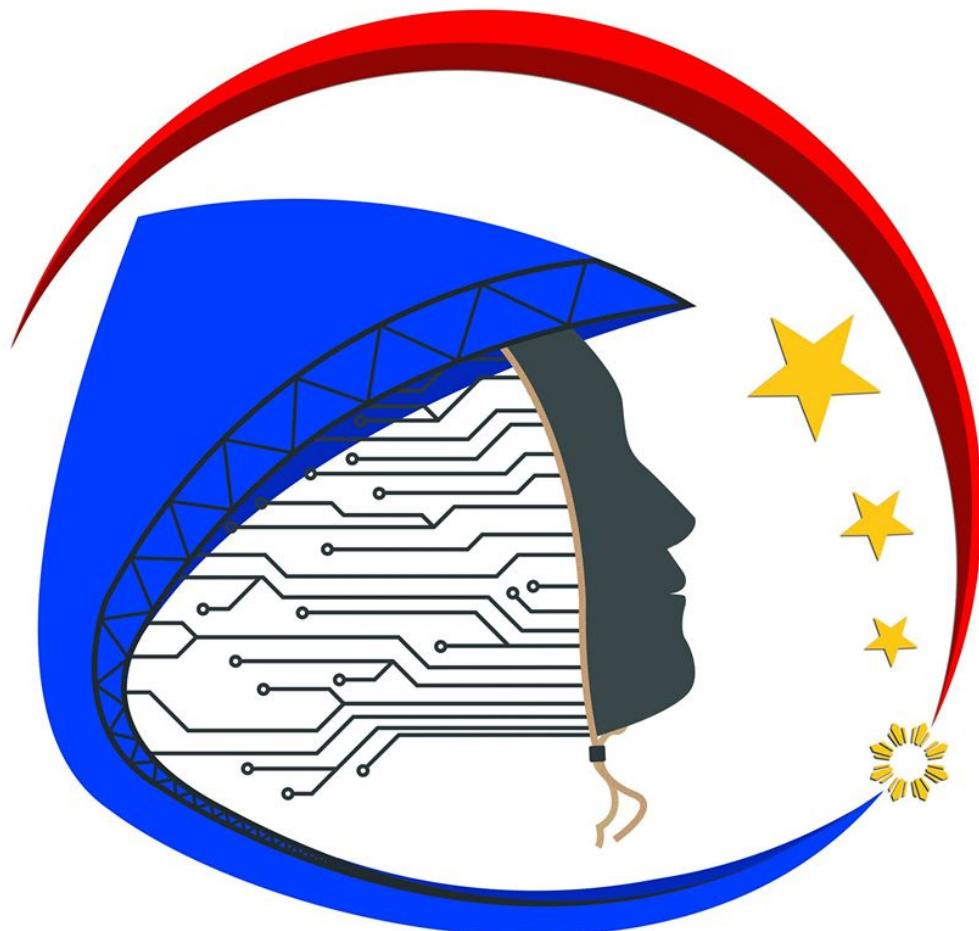
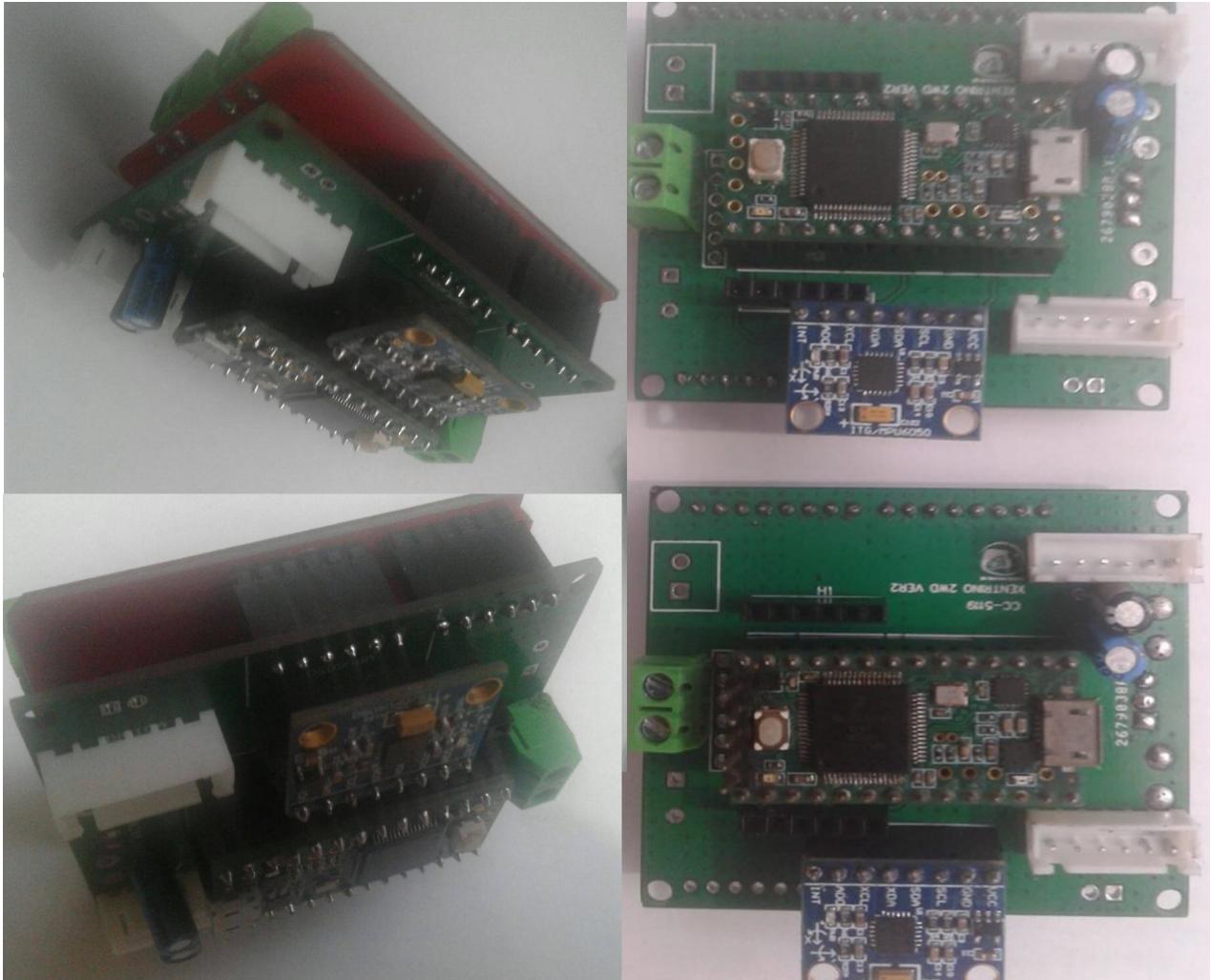


NATHANIELBOT BOARDS
Nano Board Version



Hi-Techno Barrio

Distributed by:
Xentrino Tech



DESCRIPTIONS:

Nathanielbot Board is suitably design to drive wheeled mobile robots. The board contains a complete electronic modules that functions as a robot controller. The 2WD version include single board computer,microcontroller, inertial measurement unit sensors (IMU) and motor driver. There are extra IOs pins grouped in the header ports that can be used as interface for other peripeherals such as LCD,LDR, relays and etc.

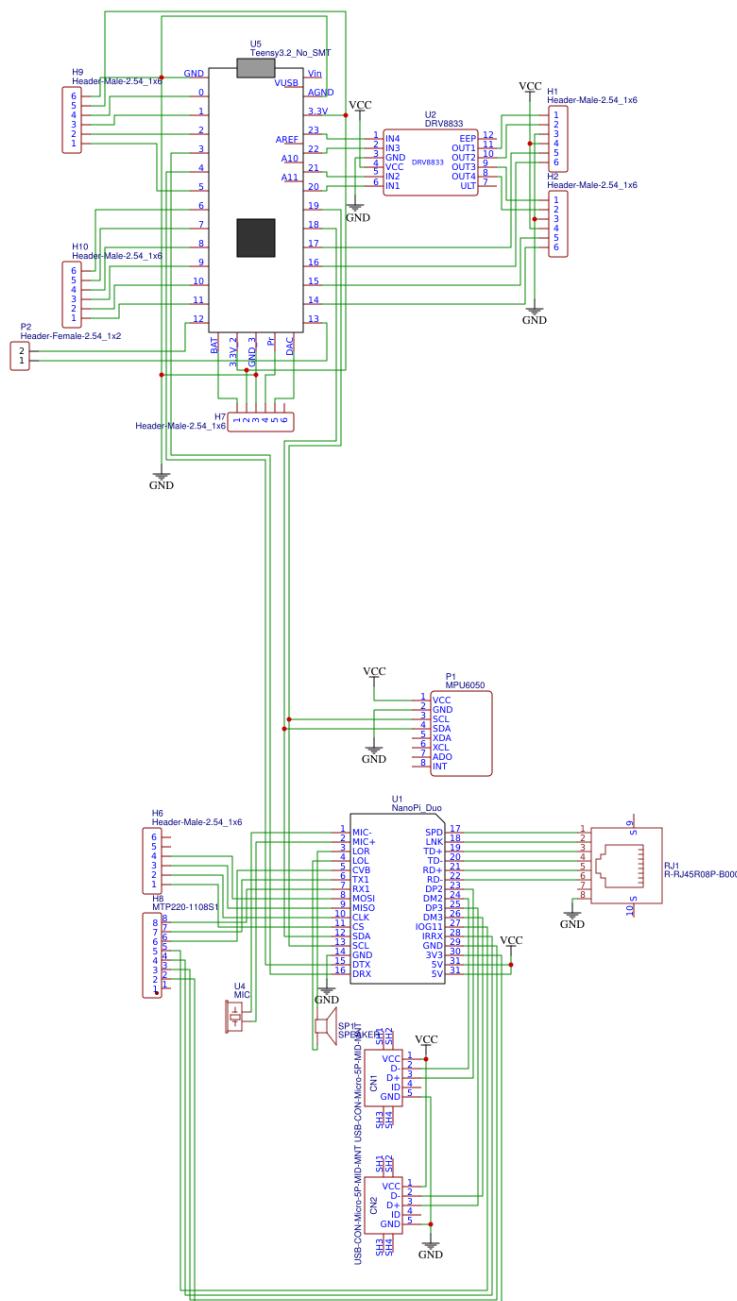
The board as an all in one electronic eliminates the difficulty of building messy circuits instead of ready made customized board. Thus the developer can easily focus on ROS programming instead of time consuming hardware setup. Also the selected electronic modules are readily and locally available and the selected hardware is cost effective.

FEATURES:

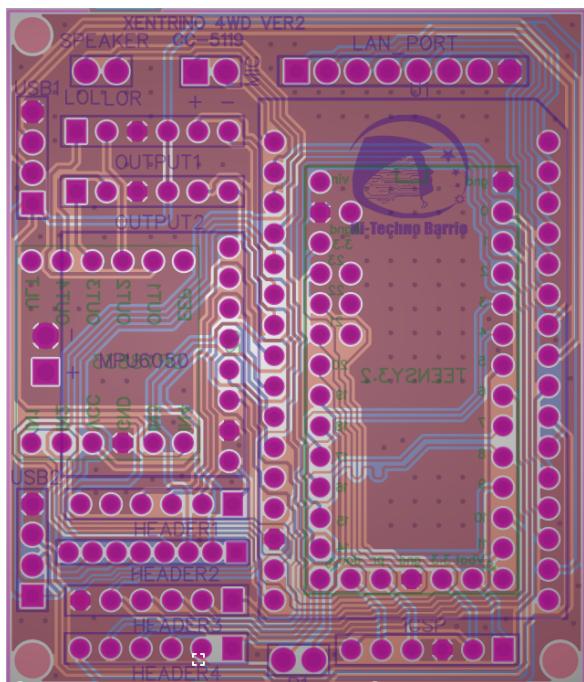
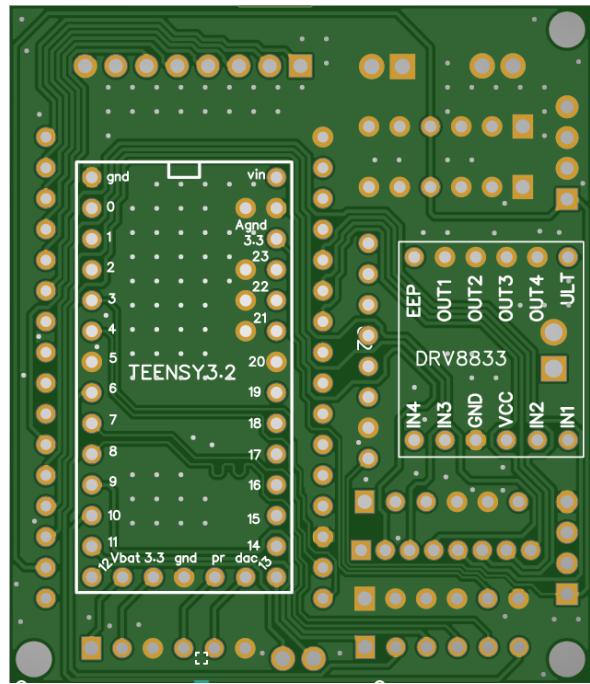
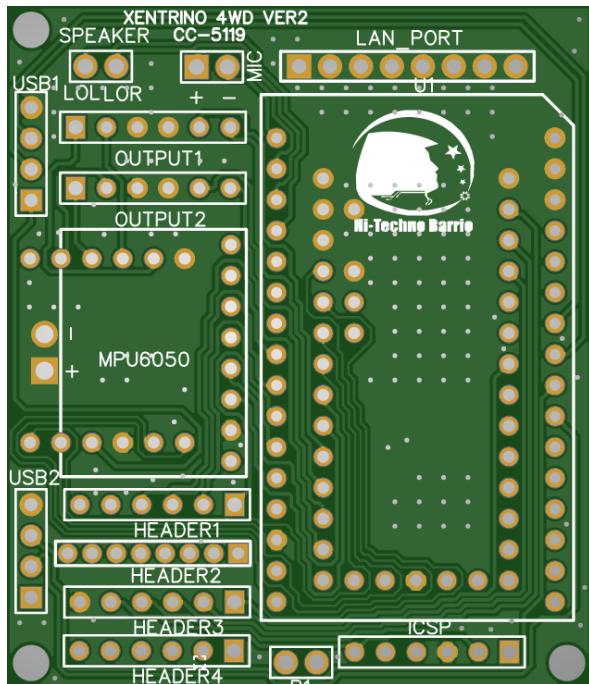
- Teensy 3.20
- Monster Moto Shield
- MPU6050/GY-85
- DRV8833

DOCUMENTATIONS:

Schematic

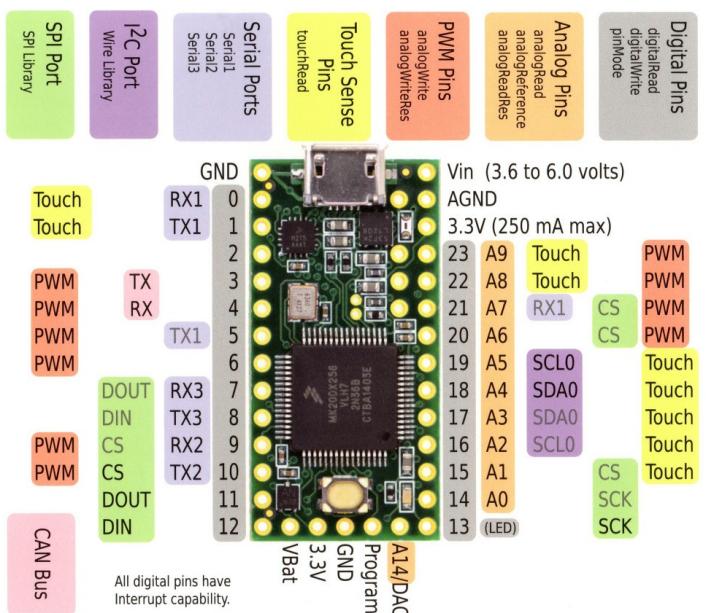


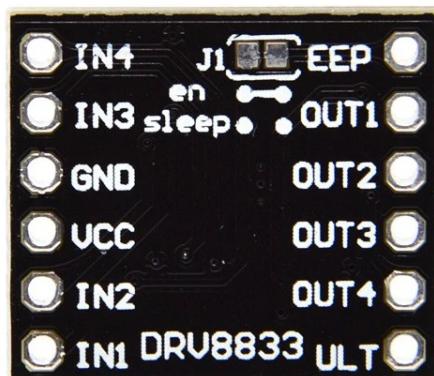
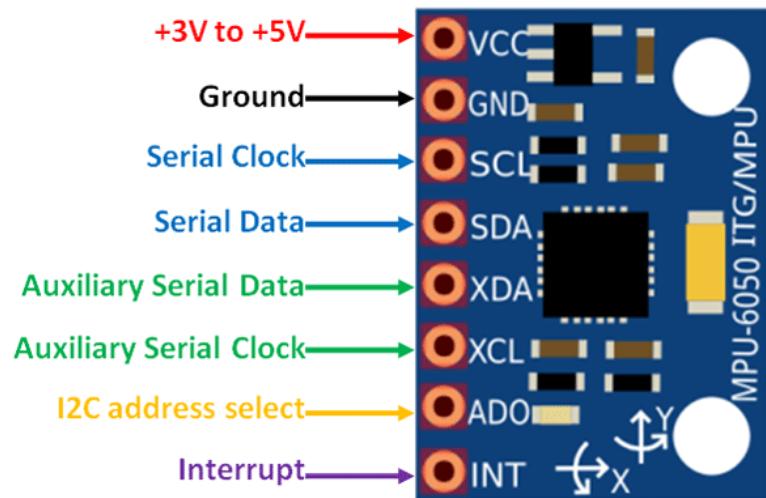
Gerber Block Diagram



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			





Datasheet

Monster Moto
MPU6050
Teensy 3.20

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

APPLICATION SETUP

