Dr Rainer Hessmer

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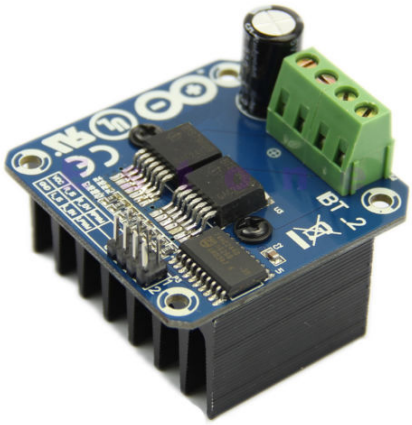
Dec
28
2013

IBT-2 H-Bridge with Arduino

Robotics Add comments

The IBT-2 H-bridge module from wingxin is an inexpensive, high power motor driver based on two BTS7960 chips and is readily available from various ebay vendors; see e.g. here.



The link provides more details but here are a few key parameters.

- Input voltage : 6V-27V
- Maximum Current : 43A
- Input level : 3.3V-5V

I am not sure whether the heat sink is sufficient for handling 43A but even if one does not drive the unit to its limits the specifications are still impressive given the typical price point of this module (currently between $13 and $17 including free shipping from China). There is relatively little information available about how to hook up the module with an Arduino controller. This thread on the Arduino forum was useful but the solution wastes a few pins and does not demonstrate bidirectional motor control. In this post I describe a slightly more complete solution that uses an Arduino controller with connected potentiometer to drive a motor via the IBT-2 module from full reverse speed to full forward speed.

For reference here is the description of the input ports and the two supported usage modes (image taken from one of the ebay postings). In this post I leverage usage mode one.

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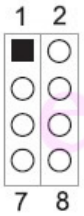
Categories

Input port



1、RPWM :Forward level or PWM signal input, active high
2、LPWM :Inversion level or PWM signal input, active high
3、R_EN :Forward drive enable input , high enable , low close
4、L_EN :Reverse drive enable input , high enable , low close
5、R_IS :Forward drive −side current alarm output
6、L_IS :Reverse drive −side current alarm output
7、VCC :+5 V power input,connected to the microcontroller 5V power supply
8、GND :Signal common ground terminal

Usage one:
VCC pick MCU 5V power supply, GND connected microcontroller GND
R_EN and L_EN shorted and connected to 5V level, the drive to work.
L_PWM, input PWM signal or high motor forward
R_PWM, input PWM signal or high motor reversal

Usage two:
VCC pick MCU 5V power supply , GND connected microcontroller GND
R_EN and L_EN short circuit and PWM signal input connected to high−speed
L_PWM, pin input 5V level motor is transferred
R_PWM, pin input 5V level motor reversal

Here is the associated Arduino sketch:

```
/*
IBT-2 Motor Control Board driven by Arduino.

Speed and direction controlled by a potentiometer attached to analog input 0
One side pin of the potentiometer (either one) to ground; the other side pin

Connection to the IBT-2 board:
IBT-2 pin 1 (RPWM) to Arduino pin 5(PWM)
IBT-2 pin 2 (LPWM) to Arduino pin 6(PWM)
IBT-2 pins 3 (R_EN), 4 (L_EN), 7 (VCC) to Arduino 5V pin
IBT-2 pin 8 (GND) to Arduino GND
IBT-2 pins 5 (R_IS) and 6 (L_IS) not connected
*/

int SENSOR_PIN = 0; // center pin of the potentiometer

int RPWM_Output = 5; // Arduino PWM output pin 5; connect to IBT-2 pin 1 (RP
int LPWM_Output = 6; // Arduino PWM output pin 6; connect to IBT-2 pin 2 (LP

void setup()
{
  pinMode(RPWM_Output, OUTPUT);
  pinMode(LPWM_Output, OUTPUT);
}

void loop()
{
  int sensorValue = analogRead(SENSOR_PIN);

  // sensor value is in the range 0 to 1023
  // the lower half of it we use for reverse rotation; the upper half for fo
  if (sensorValue < 512)
  {
    // reverse rotation
    int reversePWM = -(sensorValue - 511) / 2;
    analogWrite(LPWM_Output, 0);
    analogWrite(RPWM_Output, reversePWM);
  }
```

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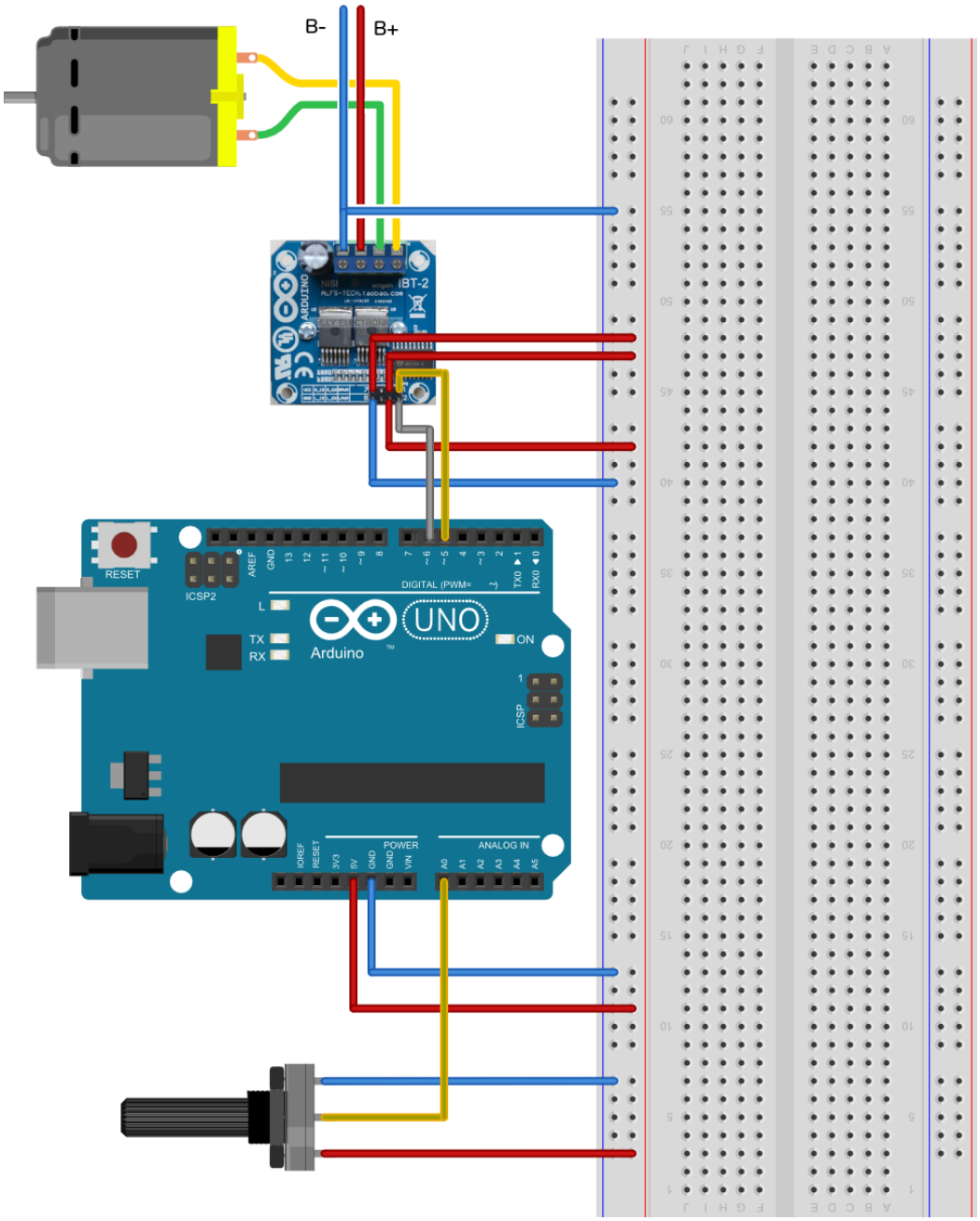
```
39    else
40    {
41      // forward rotation
42      int forwardPWM = (sensorValue - 512) / 2;
43      analogWrite(LPWM_Output, forwardPWM);
44      analogWrite(RPWM_Output, 0);
45    }
46  }
```

The following Fritzing diagram illustrates the wiring. B+ and B- at the top of the diagram represent the power supply for the motor. A 5k or 10k potentiometer is used to control the speed.



Posted by Dr Rainer Hessmer at 7:28 pm

Tagged with: Arduino

79 Responses to “IBT-2 H-Bridge with Arduino”

1. **Vinicius** says:
February 21, 2014 at 2:21 pm

Hi, do you know if it is possible to control 3 motors with only one Arduino Uno board? Thanks!

Reply

2. **jpWA** says:
March 2, 2014 at 4:03 pm

each h-bridge needs 2 pwm ports, and an arduino uno has 6, so yes

Reply

3. **Dmitri** says:
June 28, 2014 at 12:04 am

Thank you very much, Dr. Hessmer!

Reply

4. **Benny** says:
July 13, 2014 at 6:35 pm

Is there any reason why the two sides require a dedicated PWM pin? Could you tie those together to the one PWM output from the Arduino and use R_EN and L_EN to select direction? Even better, if one is always the inversion of the other, could a NOT gate be used so that to drive a motor forward and reverse, only one PWM pin and one non-PWM pin are required? (Possibly meaning as many as 6 motors could be driven from the one Arduino)

… Actually, writing that gives me an inkling as to why two PWM inputs are available…

Similarly, could two of these bridges be used to drive a high current stepper motor?

Reply

5. **Tom** says:
August 23, 2014 at 5:03 am

is it possible to ad a feedback potentiometer to the dc motor. and code in arduino so it will act like 180 degree servo.
Kind regards
Tom Jensen

Reply

6. **Ilan Elron** says:
August 24, 2014 at 7:14 am

Dr. Hessmer,
I plan to use a similar (higher power) single H bridge to control a DC brushed motor.
The bridge has a similar connection schema, including an ENABLE and LPWM and RPWM.
I am worried about cross-conduction (shoot-through) protection when changing direction. My guess is that the bridge does not provide it.
In that case, would such protection not be provided by always taking the xPWM pin that was fed until now to zero and ONLY THEN feeding the other?
In other words, in the code above, have the “forward rotation” coded thus:
// forward rotation

int forwardPWM = (sensorValue – 512) / 2;
analogWrite(RPWM_Output, 0);
analogWrite(LPWM_Output, forwardPWM);
Many thanks for your opinions and advice,
Ilan

Reply

Mike VP says:
October 23, 2017 at 5:19 am

Late reply, I know (better late then never in this case).

Yes this is an issue with these H-bridge models and high power uses.
The H-bridge does provide a delay (switch on/off delay / slew rate), which would prevent the cross-conduction issue if you could send both PWM signals at the same time. But because of the time arduino takes to process the line of code (analogWrite in this case) it will still cause cross-conduction.
I don't have the exact numbers anymore, but the build-in delay is about 4/6 ms (depending on resistance and temerature) and the delay time between the 2 lines of code is about 4-8 ms. This sometimes causes an overlap, resulting in crossconduction.
I broke about 2/3 h-bridges before I found out about this issue. The code you provides in your comment does solve the issue and no h-bridges have broken down since.
Someone also suggested using digitalWrite(pin, LOW), instead of analogWrite(pin, 0). But I don't know if this makes much difference.

Reply

7. **YeNyi** says:
September 5, 2014 at 1:39 am

Hi Thanks for the post. Very useful.
May I know IBT-2 can control the Bipolar Stepper Motor, if so, how to connect the motor.

Reply

Ray Edgley says:
December 12, 2018 at 12:44 pm

It is possible to drive a steeper motor with these bridges, however it is not recommended.

First you will need two as there are two sets of winding's in the stepper and this bridge will only handle 1 set of winding's
If you are using the IBT-2 I will assume you are planning to run a high power stepper.
In most cases, dedicated stepper drivers will not only control the voltage to the stepper motors, but also limit the current.
The voltage applied to the motor can be a lot higher than the nominal voltage of the winding's.
This is because at higher frequencies of phase reversal, the impedance of the winding's increases, reducing the current flow and motor torque will drop off rapidly. To overcome this, a higher voltage is used and the current is then limited to prevent damage to the motor.
This method allows motors that when stationary have a winding voltage of 6V to operate at up to 60V

So while it is possible, these motor drivers do not have the precise current control that would be needed but high power stepper motors.

Reply

8. **Eman** says:
September 20, 2014 at 1:10 pm

Hi,
i what to ask why some time they connect R_EN and L_EN to a digital pin

thanks ^^

Reply

9. **Ike** says:
October 6, 2014 at 7:58 am

Dr. Hessmer, thanks for sharing! Very informative and useful…I always learn something new and useful every time I visit your blog. Thx!

Reply

10. **Chrs** says:
October 14, 2014 at 11:59 pm

Good morning
This is exactly what I was looking for but would like to add rpm measurement via a slotted optical sensor board based on an LM393 chip and also an LCD display showing the measured rpm. Would you be able to provide some guidance on how to wire and program this additional equipment?
Thanks a lot
Chris

Reply

Jhovany says:
April 22, 2016 at 1:36 am

LA Q TAL SI ES POSIBLE VER TUSA RPM HE IR CONTROLANDOLAS ASTA INALAMBRICAMENTE X BLUETOOTH PERO RECUERDA Q ESTE MODULO SOLO ES DE POTENCIA NESESITAS TU ENCODER Q TE DARA TUS RPM AHI ENCODER YA COMERCIALES MUY FACIL DE USAR EFECTIVAMENTE SON SENSORES OPTICOS LO Q TE PUEDO RECOMERDAR ES Q TRATES DE UTILIZAR AL IGUAL UN MOTOR CON ENCODER YA INCLUIDO Y UN LCD CON SU PUERTO I2C Y LISTO.

Reply

11. **Jim K** says:
November 29, 2014 at 5:03 pm

Thanks for the great info!! I thought I would share how I controlled this with one PWM pin. I “drove” both the enables with one PWM pin (Pin 44 goes to R_EN and L_EN). I then used the LPWM and RPWM pins to set the direction. I also use some digital pins to power/ground the logic of the IBT-2’s (46,47,52, 53).

The following code is for the Mega-2560 and can control two IBT-2’s

```
int pwmpin1=44; // 8-bit pwm 0-255 timer 5 for motor 1
int pwmpin2=45; // 8-bit pwm 0-255 for motor 2
int mcgnd1=46; // ground for motor control 1
int mcpwr1=47; // power for motor control 1
int pwmdirection2r=48; // digital motor control direction 2
int pwmdirection2l=49; // digital motor control direction 2
int pwmdirection1r=50; // digital motor control direction 1
int pwmdirection1l=51; // digital motor control direction 1
int mcgnd2=52; // ground for motor control 2
int mcpwr2=53; // power for motor control 2

//Code snippet for two motors on 2 IBT-2’s using just two pwm pins.

//set h-bridge to reverse or CCW
digitalWrite(pwmdirection1r,HIGH);
digitalWrite(pwmdirection1l,LOW);
analogWrite(pwmpin1,128);
```

```
delay(5000);

//else CW
digitalWrite(pwmdirection1r,LOW);
digitalWrite(pwmdirection1l,HIGH);
analogWrite(pwmpin1,128);

delay(5000);
//set h-bridge to reverse or CCW motor 2
digitalWrite(pwmdirection2r,HIGH);
digitalWrite(pwmdirection2l,LOW);
analogWrite(pwmpin2,128);

delay(5000);

//else CW
digitalWrite(pwmdirection2r,LOW);
digitalWrite(pwmdirection2l,HIGH);
analogWrite(pwmpin2,128);
```

Jim K says:
November 30, 2014 at 4:51 pm
Could you share the fritzing part for the IBT-2?

Thanks,

Jim

Reply

murtadha says:
June 12, 2018 at 11:37 am

Hi can you send me this code please on my email
murtadhaalcount@gmail.com

Reply

12. **Tom Jensen** says:
February 10, 2015 at 2:48 am

Hej dr.Hessmer do you now if its possible to run a segway on two ibt2 motor controller instead
Of the sabertooth motor controller with arduino.i am a newbee to arduino. if you can run it on
Ibt2 do you then got some exsampel code for that.
Kind Regards
Tom jensen

Reply

13. **honest** says:
March 12, 2015 at 2:17 am

hey guys im looking for a arduino code to control a dc motor using an analogue stick controller

Reply

14. **Juan** says:
April 27, 2015 at 1:33 pm

Hola.
Estoy buscando un código de Arduino para controlar un motor de corriente continua utilizando un puente, H 43 A BTS

7960B,

Reply

15. **Juan** says:
May 4, 2015 at 1:03 pm

Hola,
Estoy intentando programar,ARDUINO UNO,con el puente H 43A BTS 7960 B, y no consigo que funcione el motor,estoy, con el código, IBT-2, el código me lo acepta bien pero no funciona el motor,agradecería que alguien me pasara un código.
Saludos…Juan….

Reply

16. **LINTON BROWN** says:
August 27, 2015 at 10:36 pm

HELLO SIR:
I CANNOT GET THIS PROGRAM TO VERIFY IN LINE 32.
if (sensorValue < 512)
I CAN GET THIS PROGRAM TO VERIFY IN LINE 32 WHEN I CHANGE IT TO THIS.
if (sensorValue = 512)
WHAT IS THE CORRECT LINE 32 STATEMENT.
I WILL BE LOOKING FOR YOUR REPLY.
THANK YOU
LINTON BROWN

Reply

LINTON BROWN says:
August 27, 2015 at 10:52 pm

HELLO AGAIN:
PLEASE LOOK AT LINE 32 ABOVE .WHEN I EMAILED YOU AND I HIT THE
SUBMIT COMMENT AND MY EMAIL QUESTION CHANGED FROM &lt to <.PLEASE HELP ME
ON THIS. I HOPE YOU CAN UNDERSTAND ME.
LINTON BROWN

Reply

17. **Mohamed Ihab** says:
September 3, 2015 at 5:58 am

Can you please upload the fritzing file component for the IBT-2 driver ?

Thank you Dr. Hessmer

Mohamed Ehab

Reply

Dr Rainer Hessmer says:
September 3, 2015 at 5:57 pm

Sorry to disappoint. I cheated when I created the Fritzing diagram and just overlayed the wires on an image of the IBT-2.

Reply

18. **Donald** says:
September 5, 2015 at 9:26 am

Hi Dr. Rainer,

I used these motor drivers and your recommendation to run a golf cart.

After nine holes, the cart reduced in power. It seems the battery running out of juice. Yet when I measured the voltage of the battery, it is at 13v. And the heat sink is not even warm.

Yet, when I get home, it was running fine again.

Can you offer some insight to solve this problem?

Thank you,
Donald

Reply

19. **Ryan** says:
September 18, 2015 at 4:23 pm

This chip won't switch higher than 40Hz. Just tried using it as the DC->AC component in a step up transformer and it can't handle signals over 40Hz and still deliver the power it claims to deliver.

Reply

20. **hassan** says:
October 30, 2015 at 6:45 am

I need the foot print of this driver i cant find its dimmension

Reply

21. **Swante** says:
November 15, 2015 at 10:13 am

@hassan:
In this Zip-file you can also find the size of the IBT-2
http://www.uctronics.com/download/U3537-BTS7960.zip

@Hessmer
Are you sure about the B+ and B-?
According to the pdf and all images, the pin assignment is B-,B+,M+,M- (from left to right)
According to your drawing, -M,M+,B+,B-

Or does this depends on the version of the IBT-2?

Reply

Dr Rainer Hessmer says:
May 31, 2016 at 9:42 pm

Sorry for the late response. You are right, the motor and battery connections in my diagram were wrong. I hope I did not cause any harm. I just uploaded a corrected image.

Reply

22. **Matija** says:

January 25, 2016 at 7:37 am

Hi.
I used the same drivers with electrical model cars – wondering if anyone has an idea how to get it in wifi version?

Reply

23. **agustin** says:
February 19, 2016 at 8:55 am

hi.
How much voltaje is the maximum for the VCC pin in the IBT-2 H-BRIDGE because i have been connecting 9V to that pin and the IBT2 stop working, I am not sure if I burn it or the arduino is the one damage.

Reply

24. **Amer** says:
March 17, 2016 at 2:56 am

hi
How can I get the Transfer Function of the driver (IBT-2 H-bridge module)? please.

Reply

25. **Ralph** says:
April 7, 2016 at 11:59 pm

@swante
the motor goes in next to the IBT-2 text
power source goes in the middle of the board and polarity matters

so the drawing above is wrong,
very funny when i was pwm'ing my power source

here is the right drawing
http://www.homofaciens.de/bilder/technik/rotary-encoder_010.htm

Reply

Daniel says:
April 26, 2016 at 3:27 pm

Ralph, after badly connected power source to M+ and M- , your motor driver working?

Reply

Ralph says:
May 31, 2016 at 5:19 am

Hi Daniel,

i hooked up a wiper motor and it is still doing fine
so 10 to 15 amps is still fine after wrong connection

Reply

Dr Rainer Hessmer says:
May 31, 2016 at 9:40 pm

My sincere apologies for messing up the motor and power connections. I uploaded a corrected image. Ralph, thank you for the link to your diagram.

Reply

Marketing Consultant says:
December 28, 2018 at 5:10 am

I was reading your pages while on a boat. This stuff is great. This website is like the cookies to my tasty soy milk. I just shared your article on Google Plus. When I started my browser this page was running.

Reply

26. **Daniel** says:
April 26, 2016 at 11:41 am

I too connected 12V to M+ , M-. My driver not work. If I burn it driver?

Reply

27. **Turgay OLGAY** says:
May 3, 2016 at 12:45 pm

Dear Mr
Dr Rainer Hessmer
I want to make a sun tracker dual axis
* I have arduino mega 2560 R3
* I have 2 pcs BTS7960 (my motors are 24Vdc power suplly)
* Analog sensors 4 photodiots array (4 serial for east-4 serial for west- 4 serial up -4 serial down)
* 4 push button for manuel control (east-west-up-down)
* 1 pcs wind speed sensor (output 0-5Vdc)
* when sun set sistem will park in EAST
need your help for codes
Best regards

Reply

sean H says:
June 2, 2017 at 11:00 pm

did you ever get this figured out, if so would you please share your code, I'm trying to do the same thing.

Reply

28. **donnacarter0103** says:
July 6, 2016 at 4:35 am

Amazing and informative stuff. Is it work with 3D printer? I am working on an arduino 3D printer project.

Reply

29. **Emre** says:
November 8, 2016 at 10:49 am

Dear Dr Rainer Hessmer,
Can you please kindly help me for my project?

Especially I would like to drive peltier with this motor driver. I only need to control voltage of peltier from 0 to 12 volts. What should be the pins (input pins) wiring. I dont need any reverse current. I would like to only give some pwm signals from raspberry pi with python and control output voltage. Thanks for your kind help.

Reply

sean H says:
June 2, 2017 at 10:58 pm

did you ever get an answer on this, if so would you be willing to share you code?

Reply

sean H says:
June 2, 2017 at 10:59 pm

Nevermind, your using a rasberry pi lol

Reply

Mat says:
November 20, 2018 at 12:28 am

Did you ever figure this out? I can't get mine to work

Reply

30. **Christian** says:
December 10, 2016 at 10:49 am

Good morning Mr Hessmer

I have a strong doubt on the IBT-2, that is:

I have a 12V DC motor which absorbs a current of 30A in S1 service (max 38A in S2 service).
Can I safely use IBT-2 to operate the motor 30A?
Someone said that IBT-2 is small for this use.

I would use Arduino + potentiometer for feedback control.

Thanks in advance and waiting for your answer
Christian

Reply

31. **andrew wanstall** says:
December 12, 2016 at 2:16 am

Hi

Im using the Motor Driver BTS7960 43A for a 24v dc motor 200watt, im using a raspberry pi to control the pwm. When I first set up I was using a frequency of 100htz, but when running the motor and motor controller got extremely hot!. So I change the frequency to 800htz. Its now running cool and smooth but could anyone tell me if this a good setting please?.

Many thanks

Andy

Reply

Christian says:
December 13, 2016 at 8:15 am

Yes, the driver can get up to 25Khz.
Your Motor how much current nominally (A)?

Reply

32. **Let's Get Moving! | javasjetzt** says:
January 7, 2017 at 4:06 pm

[…] On the wiring side, I connected the VCC, R_EN, and L_EN pins to the 5V from the arduino. This powers the motor driver and permanently enables both directions on the motor. Ultimately, I will most likely disable one of the two directions, however while I am testing there is no reason to do so. I connected the LPWM and RPWM to PWM capable pins on the arduino and then the positive and negative leads from the motor and the battery to the larger wire receptacles on the motor driver (Battery to B, motor to W). Everything seemed pretty self explanatory, and no research I have found so far uses the two _IS pins. More information can be found in this instructable and on this blog. […]

33. **Tim Kelly** says:
February 10, 2017 at 6:17 am

Thanks ! Can you give a clue on using the IS pin for current limiting/monitoring ?
I don't understand the datasheet for that pin.
Thanks in advance

Reply

34. **Leonardo Bisaro** says:
April 21, 2017 at 5:06 pm

Hi everybody!

Thanks in advance for your attention
I think i connected all OK, and burn the arduino UNO with the described code.

But, I can't get to move the motor.

I have any doubt aboout the GND of 12 battery and the GND of arduino.
Can I connect all GND?

Thanks in advance!!

Leo

Reply

35. **Didier Scheffers** says:
April 26, 2017 at 8:26 am

Dear Dr Hessmer ,

Thanks for your effort . IBT-2 was working in minutes and your explanation made things very easy to understand….

Reply

36. **Joe** says:
May 14, 2017 at 8:39 pm

Odd question, Is there any way I can get your fritzing part for the bts7960?

Reply

37. **Jahmoy Bruce** says:
June 4, 2017 at 6:39 am

How can I get the BTS6070 in the Fritzing software? I have been trying but I cant seem to find it.

Reply

38. **Shah** says:
June 15, 2017 at 8:24 am

Dear Dr Hessmer,
I have try this program code and its works fine…but how to change the input from VR (sensor A0) to read signal from the RC receiver…so i can control from the rc controller…tq.

Reply

39. **marc** says:
July 12, 2017 at 3:59 am

pourriez-vous me donner le code et le schema de branchement de deux ibt-2 avec arduino uno et commander par un joystick

Reply

40. **Shreck** says:
October 23, 2017 at 11:25 pm

Hi Dr Hessmer
Is power supply need to be same voltage as DC motor? Is there any step down module. What I mean is I have a 18v DC motor and 24v power supply will that burn the motor?

Reply

Mike VP says:
October 24, 2017 at 12:24 am

There is no step down module. You could run the 18vdc motor on 24vdc for a while, but it's not recommended. I've ran a 12vdc motor on 24vdc for a while (on accident) and it did not break down. Granted, it never recieved any pwm signal higher then 120 or so, but that's still 24v peaks going trough it.
These documents are also usefull if you want to take a closer look at how the h-bridge works:
https://www.elecrow.com/download/IBT-2%20Schematic.pdf
http://www.robotpower.com/downloads/BTS7960_v1.1_2004-12-07.pdf
http://pdf1.alldatasheet.com/datasheet-pdf/view/15573/PHILIPS/74HC244D.html

Reply

Jesse Grillo says:
December 26, 2018 at 10:05 pm

I signed up for your mailing list last week and I was wondering how often I'll be receiving Emails from you. I really enjoyed your page. I amofficially impressed, I need to say. I have just learned new insights because of your article. Funny thing I thought I was a pro before reading your site but it turns out I am a dummy. This is helpful to everyone who reads it.

Reply

41. **Esau Montoya** says:
November 27, 2017 at 7:56 pm

Hello Dr. Hessmer

Could you please tell me how to get the IBT-2 part to add it to a fritzing diagram?

Regards

Reply

42. **roku** says:
January 29, 2018 at 8:01 am

Hii I m Smith Mia, If you need guidance for and Roku issues then we are
here to serve best and optima Isolution to solve your issues.

Reply

43. **amber** says:
March 15, 2018 at 12:38 pm

can i get fritzing part of ibt-2 driver?

Reply

44. **Shahadat Hossain.** says:
April 20, 2018 at 7:21 am

I need to control a 12v DC motor using a BTS7960 motor driver on the basis of a digital input.
such as the motor have to run clock wise when a digital pin is high and when that digital pin is low , the motor should run counter clock wise.

what would be the code for performing this operation…?

Reply

45. **LoJo** says:
April 27, 2018 at 10:27 am

Hi,
I can't find on the web how to use side current alarm pins R_IS and L_IS.
Is someone able to help me ?
Thanks

Reply

46. **Rod** says:
April 30, 2018 at 10:41 pm

I get an error at line 27 when I Verify or Upload the code above as follows:
"a function-definition is not allowed here before '{' token"
(at the line after void loop)
I am using Arduino IDE 1.8.5 with Windows 10
Can anyone advise the problem, & how to fix this please?
Thanks

Reply

47. **Peter** says:
June 14, 2018 at 10:20 am

Is it possible for a ibt-2 to control a motor set up as a servo as I wish to make a large high torque servo.
If I run the servo motor out put in to pin one and two will it fry?
Thanks Pete

https://m.youtube.com/watch?v=aB9YIA-z0Js

Reply

48. **Kumara Fernando** says:
July 5, 2018 at 4:15 am

my arduino bts7960 connect with ibt-2 and hall sensor .problem i having with out moving hall sensor motor start working slowly please hellp me

Thanks
Kumara Fernando

Reply

49. **Kumara Fernando** says:
July 5, 2018 at 4:15 am

my arduino bts7960 connect with ibt-2 and hall sensor .problem i having with out moving hall sensor motor start working slowly please hellp me no im not

Thanks
Kumara Fernando

Reply

50. **Vahid** says:
July 8, 2018 at 10:13 am

hi…i connected this drive to a 12 v battery suddenly the battery burned with fire and smoke!!!!why this thing happened?i should say that the was no consumer attached to drive…no motors no actuator…dose reverse polarity connection of battery cause this?B+ of battery to B- of driver..and B- of battery to B+ of driver.is my driver burn down too?

Reply

51. **property valuation fees** says:
October 14, 2018 at 3:48 pm

It's amazing to go to see this site and reading the views of all colleagues regarding this
piece of writing, while I aam alsₒ zealous of getting experience.

Also visit mmy web page property valuation fees

Reply

52. **Aldhi** says:
October 17, 2018 at 3:47 am

Hi, Dr. Hessmer
May I ask for the ibt-2-h-bridge library for fritzing?

Sorry for my bad english

Thank you

Reply

53. **Luis Arturo Haro** says:
November 7, 2018 at 9:56 am

Hi, Dr. Hessmer
May I ask for the ibt-2-h-bridge library for fritzing?

Tancks in advance

Reply

54. **Farmaid: Robot Deteksi Penyakit Tanaman – Utak Atik ESP32/8266** says:
December 1, 2018 at 8:30 pm

[…] http://www.hessmer.org/blog/2013/12/28/ibt-2-h-bridge-with-arduino/ […]

55. **Marcin** says:
December 14, 2018 at 8:02 am

Hello.
Will this driver work directly with the RC receiver
FS-iA10B.
Regards.

Reply

56. **Dr. Challa** says:
January 9, 2019 at 2:43 pm

This product is much useful for drive motor. I just want to one thing that is Can I use this drive with JOYSTICK? If yes can you send code for that. Now I am using Arduino uno microcontroller. Please help me.

Reply

57. **justine barcelo** says:
February 20, 2019 at 11:01 pm

hello, need to work with 2 dc motors, already done with wiring by following the posted diagram above but when I try to turn on (forward or reverse) motor 1, motor 2 GND pin is heating causing wire melt. how can this possibly be fix? please answer Thanks

Reply

58. **Giovanni greco** says:
March 31, 2019 at 9:26 am

vorrei usare Using Motor Driver BTS7960 per sostituire una board L298N che è limitata in corrente e si blocca!!
Nel mio esempio in arduino piloto il motorino dc con due interruttori NA per le due direzioni e un potenziometro per vel.
Tuttavia uso solo tre pint di Arduino due digitali IN ad uno per il PWM!
Ho appena comprato la nuova scheda ho cercato su internet ma non trovo risposte, come posso usare il Motor Driver BTS7960 per sostituire il L298N ?
lo schetch è ottimizzato per i tre pin….
! grazie!

Reply

59. **Roberto** says:
April 4, 2019 at 10:56 am

It wanted Flickr to work seamlessly with yahoo answer app (Roberto) Mail.

Reply

60. **li** says:
May 12, 2019 at 11:39 pm

what is the right board?I did not have it.I will change the IBM_2 board.
I only have a IBM-2 and a arduino.

Reply

61. **James McWhinney** says:
July 29, 2019 at 9:38 pm

I believe there is a typo in the image above for “Usage two:”
I think what they are trying to say is:

Usage 1:
VCC to 5V power
GND to arduino ground
R_EN and L_EN shorted to 5V
L_PWM connected to PWM signal for forward speed
R_PWM connected to PWM signal for reverse speed

Usage 2:
VCC to 5V power
GND to arduino ground
L_EN to digital arduino pin for forweard
R_EN to digital arduino pin for reverse
L_PWM and R_PWM shorted to PWM signal for forward or reverse speed

(Your choice would depend on if you wanted to use up 2 PWM pins + 1 digital pin, or 2 digital pins and 1 PWM pin on your arduino)

Reply

Leave a Reply

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