

Additional components requirements for this course

1) Serial Debug cable

To access the serial(UART) pins of the board for debug purposes, a USB to Serial TTL convertor hardware is required because the Board doesn't come with on-board serial converter chip .

These are some of the recommendations only if you don't have any USB to Serial convertor cable or hardware

Note: if you have already bought USB to Serial Convertor hardware for my earlier courses, then you can continue using the same.

https://www.amazon.com/s/ref=nb_sb_noss?url=search-alias%3Daps&field-keywords=usb+to+tfl&rh=i%3Aaps%2Ck%3Ausb+to+tfl

https://www.amazon.com/ADAFRUIT-INDUSTRIES-954-SERIAL-RASPBERRY/dp/B00DJUHGH1/ref=sr_1_2?ie=UTF8&qid=1496145029&sr=8-2&keywords=usb+to+tfl+cable

<http://www.ebay.com/itm/FTDI-FT232RL-USB-to-Serial-adapter-module-USB-TO-TTL-RS232-Arduino-Cable-6Pin-HO-/131154975411?hash=item1e89721ab3:g:uCEAAOSwhOdXorrP>

2) 5VDC Power Supply

You can power the board by connecting BBB to your PC using mini USB cable, but the current via the USB port is limited to 500mA by the power management device on the board. The board shuts off if USB current exceeds this range. Also if you want to drive more peripherals, the current will be insufficient. A DC power supply solves this issue.

Recommended DC power adapter 5V @ 2A

Remember that the operating current recommended to be 1A to 2A, exceeding this range may damage the board.

<http://www.adafruit.com/products/276>

https://www.amazon.com/Super-Power-Supply-Adapter-BeagleBone/dp/B00J0CN3U8/ref=sr_1_1?ie=UTF8&qid=1496145278&sr=8-1&keywords=beaglebone+black+power+adapter

Note 1 : Buy the below components only if you want to try out example projects covered in the “hardware interfacing sections “

Note 2 : if you already have some of the below components , then please continue using it unless you have a good reason to buy new one.

Note 3 : I am not affiliate for these components and I take NO responsibility if you receive any damaged or non-working components.

7 Segment Display Common Cathode, Red

http://www.ebay.com/sch/i.html?_from=R40&_trksid=p2380057.m570.l1311.R1.TR11.TRC1.A0.H0.X7+segment+di.TRS0&_nkw=7+segment+display&_sacat=0

Male to male, male to female, female to female jumper wires

http://www.ebay.com/sch/i.html?_odkw=male+to+male&_osacat=0&_from=R40&_trksid=p2045573.m570.l1311.R1.TR6.TRC1.A0.H0.Xmale+to+male+jum.TRS0&_nkw=male+to+male+jumper+wire&_sacat=0

LCD DISPLAY GREEN 16x2 LCD16X02 HD44780 DIY ARDUINO

http://www.ebay.com/sch/i.html?_odkw=4+digit+7+segment+display&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR6.TRC1.A0.H0.XLCD+DISPLAY+16x.TRS0&_nkw=LCD+DISPLAY+16x2&_sacat=0

7 Segment Display - 4 Digit Clock Type

<http://www.ebay.com/itm/1-Pcs-LED-Display-7-Segment-4-Digit-Red-Common-Cathode-for-Arduino-US-Seller-/181981511608?hash=item2a5ef17fb8:g:VSEAAOSwHaBWivl7>

MPU-6050 6DOF 3 Axis Gyroscope+Accelerometer Module for Arduino DIY

<http://www.ebay.com/itm/MPU-6050-6DOF-3-Axis-Gyroscope-Accelerometer-Module-for-Arduino-DIY-/201415045005?hash=item2ee545af8d:g:OSwAAOSwDwtUm4WP>

