Galileo Start-Up for Mac users

EECE456 Embedded Systems Design Lab Electrical Computer Engineering Howard University

Instructor: Dr. Charles Kim

Acknowledgment:

Mr. Isa Edwads-El's contribution to this document is acknowledged.

Charles Kim – Howard University

Step 1- Download Arduino IDE

- To download Arduino for Galileo, go to the website https://communities.intel.com/docs/DOC-22226
- And find the version of the software that matches the operating system (Windows, Mac OSX, and Linux).
- Need 100MB of space to download it.
- After download the file, unzip it. (Double click the .zip file)

Step 1- Download Arduino IDE

- Unzip the file (unzips to an application) and move the Arduino application to the applications folder.
- If necessary, rename the application to differentiate it from another Arduino install but it must not have any spaces in the name.
- Double click the Arduino application to run it.



Step 2 – Install Driver

- To install the drivers, first connect the Galileo board to its 5V power supply and then connect a micro-B USB cable from the Galileo board to the computer.
- Macs already have built-in driver support for the Galileo board, so just plug it in and wait for it to boot up.
- To check the COM# (Location ID) of the Galileo board, open the System Information window (Hold option > click the apple icon in the top left corner> System Information...) and check under the USB tab for Gadget Serial v2.4. [See next page]
- Click it and the data of the board should display.

Step 2 – Install Driver

00		MacBook Pro	
▼ Hardware	USB Device Tree		
ATA	▼ USB Hi-Speed Bus		
Audio	▼ Hub		
Bluetooth	IR Receiver		
Camera	VUSB Hi-Speed Bus		
Card Reader	FaceTime HD Camera (Built-in)		
Diagnostics	▼ Hub		
Disc Burning	Gadget Serial v2.4		
Ethernet Cards	Apple Internal Keyboard / Trackpad		
Fibre Channel	W BRCM2070 Hub		
FireWire	Bluetooth USB Host Controller		
Graphics/Displays	1		
Hardware RAID			
Memory	Gadget Serial v2.4:		
PCI Cards	Product ID:	Oxbabe	
Parallel SCSI	Vendor ID:	0x8086 (Intel Corporation)	
Power	Version:	3.08	
Printers	Speed:	Up to 480 Mb/sec	
SAS	Manufacturer:	Oxfa130000 / 6	
SATA/SATA Express	Current Available (mA):	500	
SPI	Current Required (mA):	2	
Storage			
Thunderbolt			
USB			
▼ Network			
Firewall			
Locations			
Volumes			
WWAN			
Wi-Fi			

Step 3 – Firmware Update

 To update the firmware, go to Tools>Port (or Serial Port) and select /dev/cu.usbmodemXXXX. The X's should match the COM # of your Galileo board.



Step 3 – Firmware Update

• After that, go to Tools>Board and select Intel Galileo (or Gen2 if that is the version of the Galileo Board).



Step 3 – Firmware Update

• Then go to Help>Firmware Update and click Yes.



Charles Kim – Howard University

Step 4 – Upload the Blink Program

- After the firmware updates, a message saying it was successful should pop up.
- Now upload the first program, by going to File>Example>01.Basics>Blink and click Upload.
- The program should run on the board and a blinking green LED should be seen.