Licensing of Intellectual Property

Phoenix
Ambulatory Blood Pressure
Monitoring System

26 April 2009
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Legal Requirements

- Works created by the project
  - Must be attributed to individual authors
    - "give credit where credit is due"
  - Free and open source
    - Rationale
      - http://www.phoenix.tc-ieee.org/ 000_Background/ Phoenix_OpenSource.htm
- A third party MAY
  - Further modify the project's created works
  - Incorporate the project's created works or their derivations
    - Into aggregates containing elements from several different sources
  - Redistribute and convey it's derivations and aggregations
    - Either with or without royalty or fee
- A third party MAY NOT
  - Restrict others from creating, distributing, or conveying their own derivations of the project's created works

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Legal Requirements

- Software
  - All software created by the project is free and open
    - As defined by the Open Source Initiative
    - http://www.opensource.org/docs/definition.php
      (version 1.9, 2006-07-24)
  - All software incorporated from third parties into the product
    - Is free
    - May be freely redistributed
    - May be bundled with free and open source software without impinging on rights of distribution under the open source definition
  - OSI Article 1, "Free Redistribution"
    - "The license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The license shall not require a royalty or other fee for such sale."
  - OSI Article 3, "Derived Works"
    - "The license must allow modifications and derived works, and must allow them to be distributed under the same terms as the license of the original software."

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Legal Requirements

- Hardware
  - All hardware designs shall be free — Free Hardware Design
    - Design can be freely copied, distributed, modified, and manufactured
    - Does not imply:
      - that the design cannot also be sold, or
      - that any hardware implementation of the design will be free of cost
    - Ref: Open Collector
      - http://www.opencollector.org/Whyfree/definitions.html
  - All hardware designs shall be open — Open Source Hardware
    - The interface to the hardware must be explicitly made public
      - so the hardware can be used freely
    - The design of the hardware must be made public
      - so that others can implement it and learn from it
    - The tools used to create the design should be free
      - so that others can develop and improve the design
    - Ref: Open Collector
      - http://www.opencollector.org/Whyfree/open_hardware.html

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Phoenix's Current Licenses

- Hardware
  - Hardware Design Public License
    - Version 0.04
    - Opencollector.org
    - Draft only ⇒ not usable
- Software
  - GNU General Public License (GPL)
    - Copy-left licenses over-constrain derivations
      - See http://www.fsf.org/licensing/essays/copyleft.html
- Other
  - Phoenix Release
    - http://www.phoenix.tc-ieee.org/000_Background/Phoenix_Release.htm

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Alternatives

- GNU General Public License version 3.0 (GPLv3)
  - http://www.gnu.org/licenses/gpl.html
- GNU Lesser General Public License version 3.0 (LGPLv3)
  - http://www.gnu.org/licenses/lgpl.html
- Common Public Attribution License 1.0 (CPAL)
  - http://www.opensource.org/licenses/cpal_1.0
- Mozilla Public License 1.1 (MPL 1.1)
  - http://www.opensource.org/licenses/mozilla1.1.php
- Creative Commons Attribution license version 3
  - http://creativecommons.org/licenses/by/3.0/

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Other Open Hardware Projects
Arduino

- http://arduino.cc/
  - Open-source electronics prototyping platform
    - Flexible, easy-to-use hardware and software
    - Intended for artists, designers, hobbyists…
- Licenses
  - Source code for Java environment (for writing firmware & uploading to device)
    - GPL
  - C/C++ microcontroller libraries
    - LGPL
  - Schematics and CAD files
    - Creative Commons Attribution Share-Alike license
      - http://creativecommons.org/licenses/by-sa/2.5/
- Hosting
  - Software & firmware source code hosted on Google Code
    - http://code.google.com/p/arduino/
  - Documentation (tutorials & hardware designs) hosted on project home
- Collaboration sites
  - Project maintains separate wiki (called the "Playground"), blog, & forum

> ***Potential Learning Interest to Phoenix***
>
> *Arduino Lily $\Rightarrow$ wearable*
>
> *Adruino Mini $\Rightarrow$ small*

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Other Open Hardware Projects
SquidBee

- http://www.squidbee.org/
  - Open hardware and source wireless sensor device
    - Goal: get an "open mote" to create Wireless Sensor Networks (WSN)
  - Design based on Arduino
- Licenses
  - New versions of those for Arduino

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Recommendations

- Hardware (Design)
  - GNU Lesser General Public License version 3.0 (LGPLv3)
    - http://www.gnu.org/licenses/lgpl.html
  - Statutory Invention Registration
    - http://www.uspto.gov/web/offices/com/sol/notices/fr991124.htm
- Software
  - GNU Lesser General Public License version 3.0 (LGPLv3)
    - http://www.gnu.org/licenses/lgpl.html
- Other
  - Creative Commons Attribution license version 3
    - http://creativecommons.org/licenses/by/3.0/

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