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| Photo displaying partial image of two pie charts on a canvas-textured page |
| PO3\_DGW  Hardware Software Interface Document |
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Status table

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| PO3\_DGW\_HSI | |
| Version | V0.1 |
| Status | Draft |
| Author | Bassem Ezzat (Architect)  Mohammed Elsayed (Developer) |
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| Reviewer |  |

Table of history

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| --- | --- | --- | --- |
| Version | Author(s) | Date | Changes |
| 0.0 | - Bassem Ezzat  - Moahmmed Elsayed | January 31, 2020 | Create HIS document |
| 0.1 | - Bassem Ezzat  - Moahmmed Elsayed | February 4, 2020 | Add pinout of the components |

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1. Hardware requirements

The hardware that system required illustrated in the following list:

* Display Device
* Sound device
* User interacting device
* Control device
* Power source
* Casing and packaging
  1. Block Diagram



Figure 1. block Diagram of Hardware requirements

* 1. Components

This section lists the requirements in details.

* + 1. Display device

A 16x2 Dot Matrix Liquid Crystal Display Controller will be used as display device.

* + 1. Sound device

A 5V buzzer will be used as sound drive for alarm mode.

* + 1. User interacting device

A three push buttons will be used to allow user to interact with the system.

* + 1. Control device

A microcontroller ATmega32 will be used as controller device of the system.

* + 1. Power source

A 9V battery will be used to power the system up.

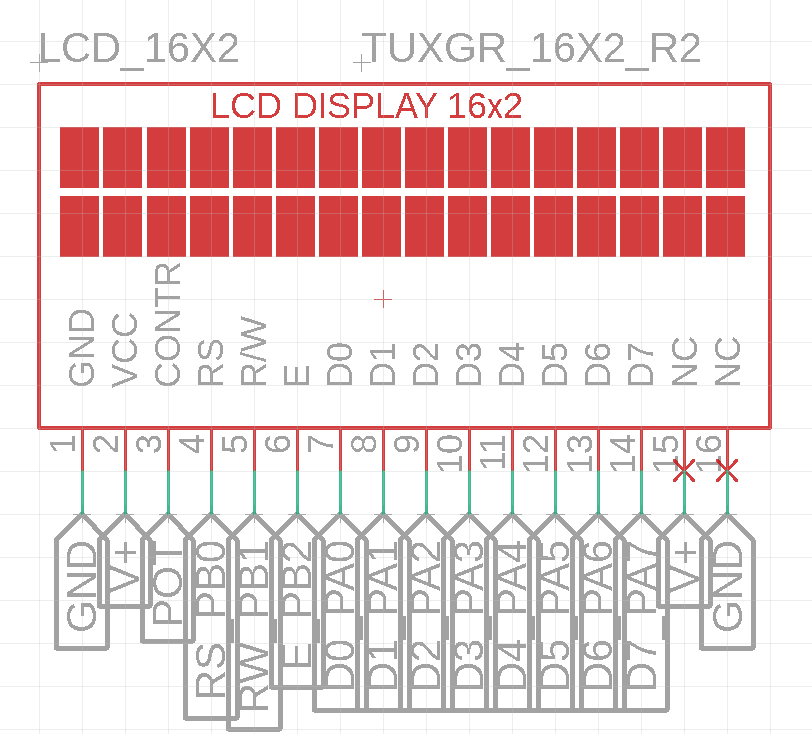
* + 1. Casing and packaging

Not specified

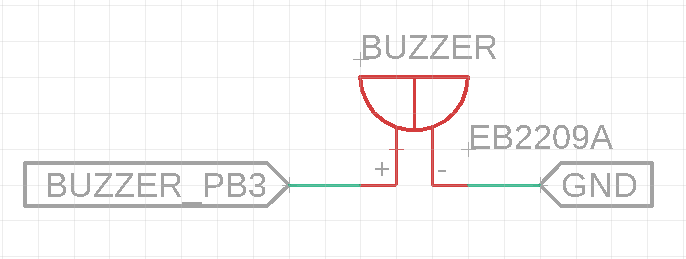
* 1. Hardware connections

This section provides a detailed pin connection for each hardware component.

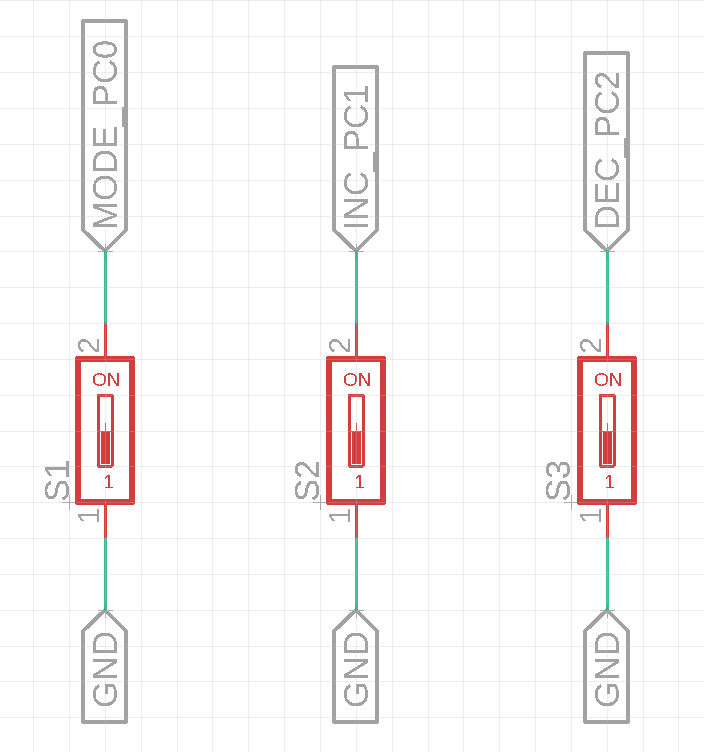
* + 1. Display device



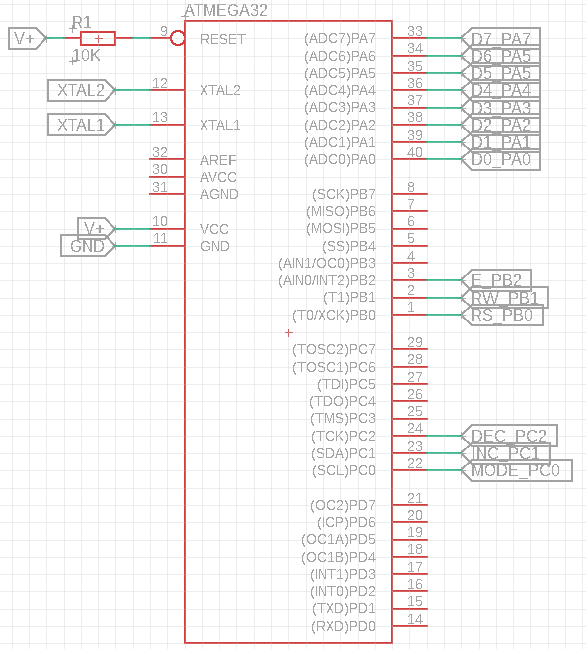
* + 1. Sound device



* + 1. User interacting device



* + 1. Control device



* + 1. Power source

