## EE3032 Mark Sheet for PCB Design and Wiring (10%)

|  |  |
| --- | --- |
| **INSTRUCTIONS TO STUDENTS** | **Total**  **[50 Marks]** |
| **Fill in the shaded fields using a word processor and submit a hardcopy to the examiner during the PCB assessment.**  **The circuit schematics and PCB design must be uploaded to wiki in image format before the assessment.**  **To simplify the assessment, avoid uploading these items in PDF format or as attachments to wiki.** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Team Number:** | ***Click here to enter text.*** | **Academic Year:** | ***Choose an item.*** | **Semester:** | ***Choose an item.*** |
| **Project Title:** | ***Click here to enter text.*** | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Description** | **Maximum Score** | **Awarded Score** |
| **Planning and Organisation**    ⏵To assess the effort and quality of planning and organisational work for the PCB | Schematics are correct and neat | 5 |  |
| PCB layouts are compact, neat and optimised | 5 |  |
| Analog and digital circuits are clearly separated | 2 |  |
| Meaningful and concise labels are used when needed | 2 |  |
| Connections to other boards are located by the side | 2 |  |
| Boards are modularised, balancing quantity and ease of modification | 2 |  |
| Timely completion of all PCB related tasks, including submission date | 2 |  |
| **PCB Design Rules**  ⏵To assess how well the specified PCB design rules are followed | Every individual board has its borders (box up) | 2 |  |
| Power and Ground tracks are thick whenever possible | 2 |  |
| Guidelines on width, spacing and pad/hole size are followed | 2 |  |
| Proper routing between IC leads are used when necessary | 2 |  |
| 45 degree bends are used whenever possible | 2 |  |
| **Implementation**  ⏵ To assess the quality of the designed PCBs and how well they fulfil their intended purposes | Soldering is good (Cone-shaped, no cold solder) | 5 |  |
| Right power connectors are used (Header, BNC, etc) | 2 |  |
| PCB headers and housing sockets are appropriately used | 2 |  |
| Ribbon cables (for buses) are used appropriately | 2 |  |
| IC/SIL sockets, etc. for costly components are used | 2 |  |
| Minimum jumpers have been used | 2 |  |
| At least 1 feature is working properly on each board | 5 |  |
|  |  |  |  |
| **Examiner’s Remarks Regarding the Team Being Assessed** |  | | |