2022 Digital IC Design Homework 3

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NAME | |  | | | | | |
| Student ID | |  | | | | | |
| **Simulation Result** | | | | | | | |
| Functional simulation | Pass/ Fail (encoder) | | Pass/ Fail (decoder) | Gate-level simulation | Pass/ Fail (encoder) | | Pass/ Fail (decoder) |
| (your pre-sim result) encoder/decoder  img0 | | | | Encoder img0 | | | |
| (your pre-sim result) encoder/decoder  img1 | | | | Encoder img1 | | | |
| (your pre-sim result) encoder/decoder  img2 | | | | Encoder img2 | | | |
| **Synthesis Result** | | | | **encoder** | | **decoder** | |
| Total logic elements | | | |  | |  | |
| Total memory bit | | | |  | |  | |
| Embedded multiplier 9-bit element | | | |  | |  | |
| Simulation time img0 | | | | simulation time (ns) | | simulation time (ns) | |
| Simulation time img1 | | | | simulation time (ns) | | simulation time (ns) | |
| Simulation time img2 | | | | simulation time (ns) | | simulation time (ns) | |
| (your flow summary) encoder | | | | (your flow summary) decoder | | | |
| **Description of your design** | | | | | | | |
|  | | | | | | | |

*Scoring = (Total logic elements + total memory bit + 9\*embedded multiplier 9-bit element)*