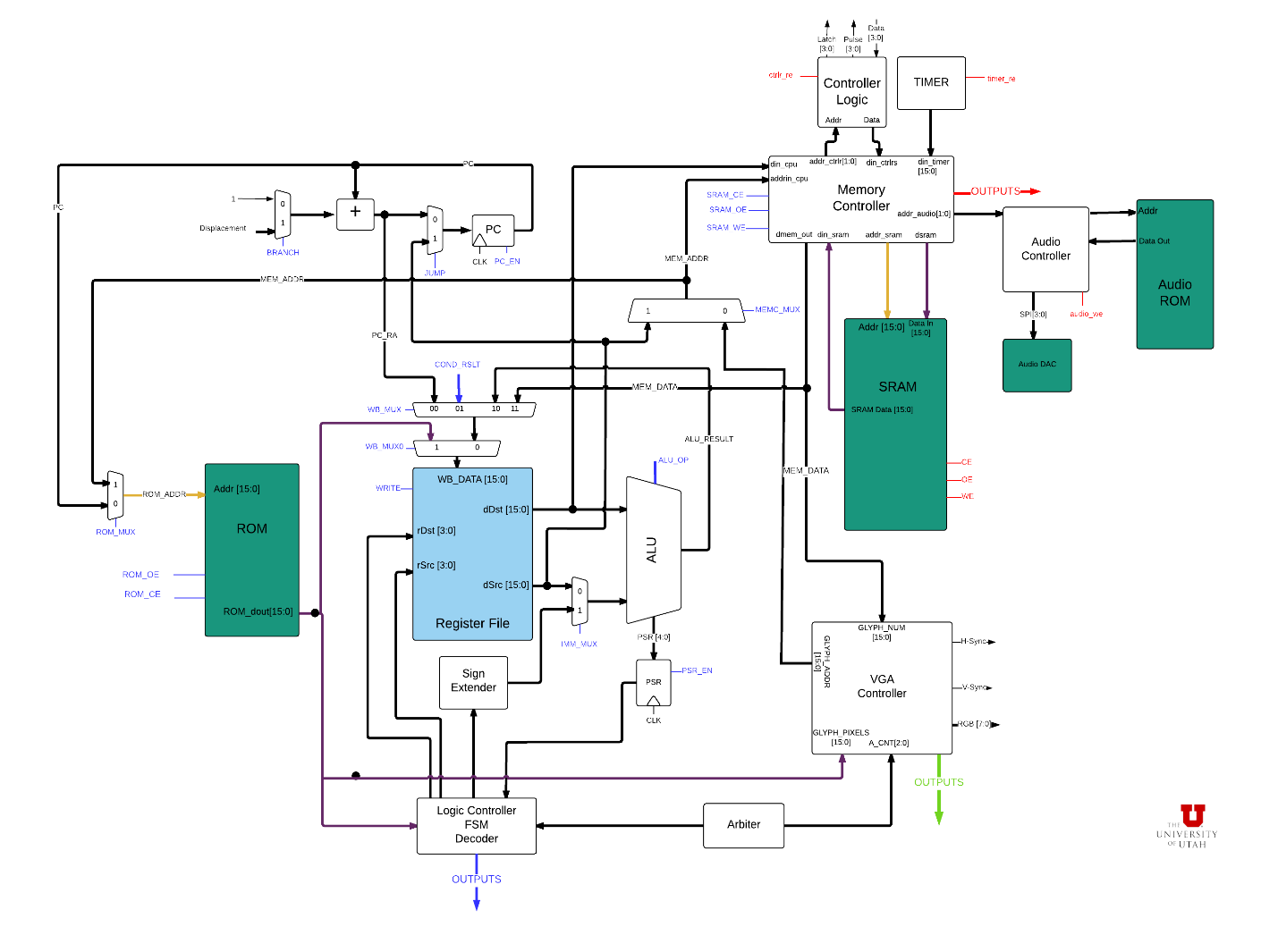
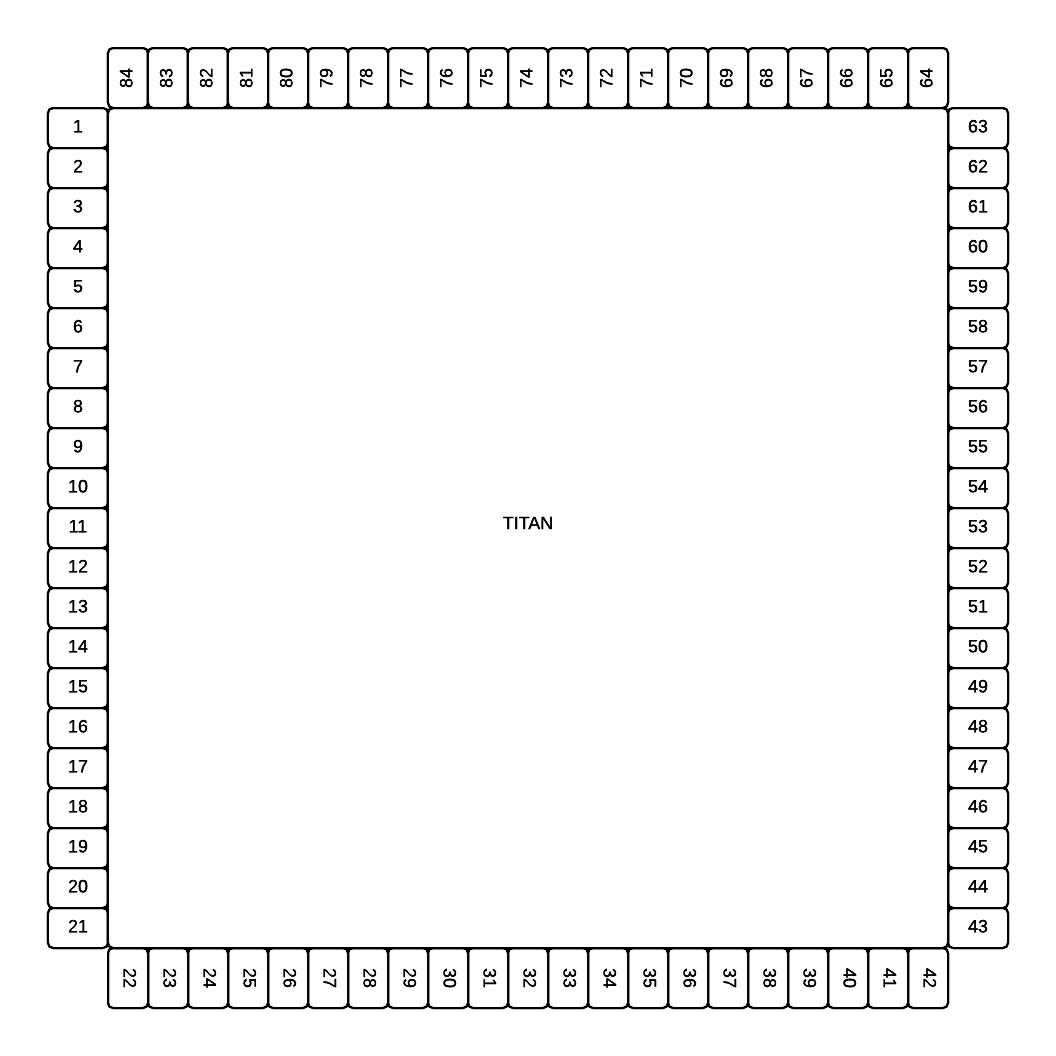
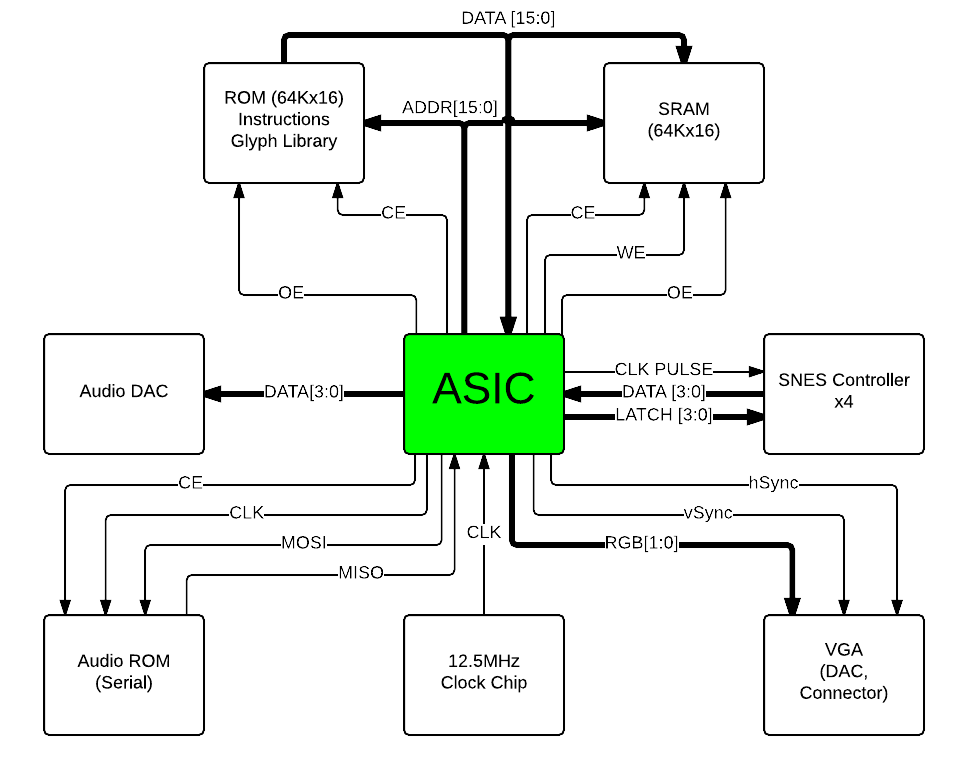
**T.E.S.S. Data Sheet**

1. **Overview**
   1. **Located in the proposal**
   2. **Talk about general overview of the chip**
2. **Features**
   1. **Mention VGA, AUDIO, external memory interface from a high level**
3. **Abbreviations**
   1. **Tabulate possible abbreviations that might be used in the paper**
4. **Block Diagram  
   **
5. **Pin Layout  
   **

**Pin Table**

|  |  |  |
| --- | --- | --- |
| Name | Number | Description |
| SRAM WE | 1 |  |
| SRAM OE | 2 |  |
| SRAM CE | 3 |  |
| ADDR <15> | 4 |  |
| ADDR <14> | 5 |  |
| ADDR <13> | 6 |  |
| GND | 7 |  |
| ADDR <12> | 8 |  |
| ADDR <11> | 9 |  |
| ADDR <10> | 10 |  |
| ADDR <9> | 11 |  |
| ADDR <8> | 12 |  |
| ADDR <7> | 13 |  |
| ADDR <6> | 14 |  |
| ADDR <5> | 15 |  |
| VDD | 16 |  |
| ADDR <4> | 17 |  |
| ADDR <3> | 18 |  |
| ADDR <2> | 19 |  |
| ADDR <1> | 20 |  |
| ADDR <0> | 21 |  |
| DIN <0> | 22 |  |
| DIN <1> | 23 |  |
| DIN <2> | 24 |  |
| DIN <3> | 25 |  |
| DIN <4> | 26 |  |
| DIN <5> | 27 |  |
| DIN <6> | 28 |  |
| DIN <7> | 29 |  |
| DIN <8> | 30 |  |
| DIN <9> | 31 |  |
| DIN <10> | 32 |  |
| VDD | 33 |  |
| DIN <11> | 34 |  |
| DIN <12> | 35 |  |
| DIN <13> | 36 |  |
| DIN <14> | 37 |  |
| DIN <15> | 38 |  |
| ROM\_CE | 39 |  |
| ROM\_OE | 40 |  |
| RGB <0> | 41 |  |
| RGB <1> | 42 |  |
| hSync | 43 |  |
| vSync | 44 |  |
| PSR <0> | 45 |  |
| PSR <1> | 46 |  |
| PSR <2> | 47 |  |
| GND | 48 |  |
| PSR <3> | 49 |  |
| PSR <4> | 50 |  |
| CTRLR LATCH <1> | 51 |  |
| CTRLR LATCH <0> | 52 |  |
| CTRLR DATA <1> | 53 |  |
| CTRLR DATA <0> | 54 |  |
| CLK PI;SE | 55 |  |
| NC | 56 |  |
| VDD | 57 |  |
| CLK | 58 |  |
| STATE BIT | 59 |  |
| AUDIO DAC <0> | 60 |  |
| AUDIO DAC <1> | 61 |  |
| AUDIO DAC <2> | 62 |  |
| AUDIO DAC <3> | 63 |  |
| AUDIO\_ROM\_SPI\_MISO | 64 |  |
| AUDIO\_ROM\_SPI\_MOSI | 65 |  |
| AUDIO\_ROM\_SPI\_CLK | 66 |  |
| AUDIO\_ROM\_SPI\_CE | 67 |  |
| DOUT <15> | 68 |  |
| DOUT <14> | 69 |  |
| DOUT <13> | 70 |  |
| DOUT <12> | 71 |  |
| DOUT <11> | 72 |  |
| DOUT <10> | 73 |  |
| GND | 74 |  |
| DOUT <9> | 75 |  |
| DOUT <8> | 76 |  |
| DOUT <7> | 77 |  |
| DOUT <6> | 78 |  |
| DOUT <5> | 79 |  |
| DOUT <4> | 80 |  |
| DOUT <3> | 81 |  |
| DOUT <2> | 82 |  |
| DOUT <1> | 83 |  |
| DOUT <0> | 84 |  |

1. **Data path**
   1. **Core**
   2. **Audio**
   3. **VGA**
   4. **Memory Map**
2. **Peripheral interface**
3. **Electrical Characteristics**
4. **Application   
   **
5. **Package Dimensions   
   Available through MOSIS**