**APPENDIX**

· **4 BIT BINARY FULL ADDER (FOR THE 3 BIT ADDER USED, WE WILL INPUT THE MSB AS 0 IN THE 4 BIT ADDER) :** [**https://www.ti.com/lit/ds/symlink/sn54f283.pdf?ts=1604579103555&ref\_url=https%253A%252F%252Fwww.google.com%252F**](https://www.ti.com/lit/ds/symlink/sn54f283.pdf?ts=1604579103555&ref_url=https%253A%252F%252Fwww.google.com%252F)

· **4 BIT MAGNITUDE COMPARATOR (UNSIGNED) (FOR 3 BIT COMPARATOR USED, WE WILL CONSIDER THE MSB AS 0 FOR THE INPUT.FOR 1 BIT COMPARATOR USED, WE WILL CONSIDER THE FIRST 3 TERMS FROM MSB END AS 0):**

[**http://ee-classes.usc.edu/ee459/library/datasheets/DM74LS85.pdf**](http://ee-classes.usc.edu/ee459/library/datasheets/DM74LS85.pdf)

· **TRIPLE 3 INPUT AND GATE:**

[**https://assets.nexperia.com/documents/data-sheet/HEF4073B.pdf**](https://assets.nexperia.com/documents/data-sheet/HEF4073B.pdf)

* **SINGLE 3 INPUT AND GATE:**

[**https://www.ti.com/lit/ds/symlink/sn74lvc1g11-ep.pdf?ts=1605862629105&ref\_url=https%253A%252F%252Fwww.google.com%252F**](https://www.ti.com/lit/ds/symlink/sn74lvc1g11-ep.pdf?ts=1605862629105&ref_url=https%253A%252F%252Fwww.google.com%252F)

· **DUAL**  **2 INPUT AND GATE:**

[**https://www.ti.com/lit/ds/symlink/sn74lvc2g08-ep.pdf?ts=1605701719859&ref\_url=https%253A%252F%252Fwww.google.com%252F**](https://www.ti.com/lit/ds/symlink/sn74lvc2g08-ep.pdf?ts=1605701719859&ref_url=https%253A%252F%252Fwww.google.com%252F)

* **HEX 2 INPUT AND GATE:**

[**https://www.ti.com/lit/ds/symlink/sn74as808b.pdf?ts=1605634224261&ref\_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FSN74AS808B**](https://www.ti.com/lit/ds/symlink/sn74as808b.pdf?ts=1605634224261&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FSN74AS808B)

· **QUAD 2 INPUT OR GATE:**

[**https://assets.nexperia.com/documents/data-sheet/74HC\_HCT32.pdf**](https://assets.nexperia.com/documents/data-sheet/74HC_HCT32.pdf)

* **SINGLE 2 INPUT OR GATE:**

[**https://www.ti.com/lit/ds/symlink/sn74ahc1g32.pdf?HQS=TI-null-null-mousermode-df-pf-null-wwe&DCM=yes&ref\_url=https%3A%2F%2Fwww.mouser.in%2F&distId=26**](https://www.ti.com/lit/ds/symlink/sn74ahc1g32.pdf?HQS=TI-null-null-mousermode-df-pf-null-wwe&DCM=yes&ref_url=https%3A%2F%2Fwww.mouser.in%2F&distId=26)

· **SINGLE INVERTER GATE (NOT GATE):**

[**https://www.ti.com/lit/ds/symlink/sn74lvc1g04.pdf?ts=1604835978529&ref\_url=https%253A%252F%252Fwww.google.com%252F**](https://www.ti.com/lit/ds/symlink/sn74lvc1g04.pdf?ts=1604835978529&ref_url=https%253A%252F%252Fwww.google.com%252F)

· **4 BIT COUNTER (IN CIRCUIT WE ARE USING A 3 BIT COUNTER WHICH COUNTS FROM 0-5. SINCE, THERE IS NO COMMERCIALLY AVAILABLE 3 BIT COUNTER, WE USE A 4 BIT COUNTER WITH MSB 0 AND RESET AFTER BINARY NUMBER 5):**

[**https://www.st.com/resource/en/datasheet/cd00002534.pdf**](https://www.st.com/resource/en/datasheet/cd00002534.pdf)

· **6 BIT REGISTER (Q AS OUTPUT . HERE WE NEED A 5 BIT REGISTER, SO MSB WOULD BE INPUT AS 0):**

[**https://www.mouser.com/datasheet/2/268/sy10-100e151-777518.pdf**](https://www.mouser.com/datasheet/2/268/sy10-100e151-777518.pdf)

· **D FLIP-FLOP (POSITIVE EDGE):**

[**https://www.ti.com/lit/ds/symlink/sn74lvc1g80.pdf?ts=1604639408550&ref\_url=https%253A%252F%252Fwww.google.com%252F**](https://www.ti.com/lit/ds/symlink/sn74lvc1g80.pdf?ts=1604639408550&ref_url=https%253A%252F%252Fwww.google.com%252F)

· **LED LIGHT (25 NEEDED):**

[**https://www.alliedelec.com/m/d/6355b8aba0b01578df0bb7b871ceefd7.pdf**](https://www.alliedelec.com/m/d/6355b8aba0b01578df0bb7b871ceefd7.pdf)

· **ROM :**

[**https://amigan.yatho.com/2708EPROM.pdf**](https://amigan.yatho.com/2708EPROM.pdf)

· **PUSH BUTTON:**

[**https://www.hdk.co.jp/pdf/eng/e291702.pdf**](https://www.hdk.co.jp/pdf/eng/e291702.pdf)

· **ASCII KEYBOARD:**

[**https://datasheetspdf.com/pdf-file/624330/Swtpc/AY-5-2376/1**](https://datasheetspdf.com/pdf-file/624330/Swtpc/AY-5-2376/1)

**QUAD SR LATCH:**

[**https://www.jameco.com/Jameco/Products/ProdDS/47407.pdf**](https://www.jameco.com/Jameco/Products/ProdDS/47407.pdf)