| 74LS86: XOR gate | | |
| --- | --- | --- |
| A | B | Y |
| 0 | 0 | 0 |
| 0 | 1 | 1 |
| 1 | 0 | 0 |
| 1 | 1 | 0 |

74LS173:

4-bit D register

This register stores 4 bits. You write data to it by holding G1 and G2 low and pulsing the clock.

74LS245:

8-bit bus transceiver

This allows 8-bit data from A to B or B to A depending on the DIR input. The EN input disables the device so that A and B are isolated.

74LS283:

4-bit binary adder

This chip performs addition of two 4-bit binary numbers. A+B=Σ. Co and C4 are carry in and carry out for chaining multiple adders together

| 74LS00:  NAND gate | | |
| --- | --- | --- |
| A | B | Y |
| 0 | 0 | 1 |
| 0 | 1 | 1 |
| 1 | 0 | 1 |
| 1 | 1 | 0 |

| 74LS04:  Inverter | |
| --- | --- |
| A | Y |
| 0 | 1 |
| 1 | 0 |

74LS157:

2-to-1 line selector

A 4-bit input is selected from one of two sources (A or B) and is routed to the four outputs (Y).

74LS161:

4-bit binary counter

The 4-bit output is incremented on each CLK pulse. Alternately, any value can be loaded via the 4-bit input.

74LS173: 4-bit D register

This register stores 4 bits. You write data to it by holding GI and G2 low and pulsing the clock.

74189:

64-bit RAM

This static RAM holds 164-bit words. After applying a binary number to the four address inputs, data can be read or written to the memory.

74LS245:

8-bit bus transceiver

This allows 8-bit data from A to B or B to A depending on the DIR input. The EN input disables the device so that A and B are isolated.