

3 Input XOR

IC List:

- ① 2 7486 Quad 2-input XOR gates.

7486	7408	7486
GND-7	GND-7	GND-7
Vcc-14	Vcc-14	Vcc-14

Half Adder

IC List:

- ① one 7486 Quad 2-input XOR
- ② one 7408 Quad 2-input AND gate.

7408	7486
GND-7	GND-7
Vcc-14	Vcc-14

Half Subtractor

IC List:

- ① one 7486 Quad 2-input XOR gate
- ② one 7408 Quad 2-input AND gate
- ③ one 7404 HEX inverting gates.

7404	7408	7486
GND-7	GND-7	GND-7
Vcc-14	Vcc-14	Vcc-14

Full Adder

IC List:

- ① 2 7486 Quad 2-input XOR gates.
- ② 2 7408 Quad 2-input AND gates.
- ③ 1 7432 Quad 2-input OR gates.

7404	7408	7432
GND-7	GND-7	GND-7
Vcc-14	Vcc-14	Vcc-14

Full Subtractor

IC List:

- ① 2 7486 Quad 2-input XOR gates.
- ② 2 7408 Quad 2-input AND gates.
- ③ 1 7432 Quad 2-input OR gates.
- ④ 2 7404 HEX inverting gates.

7486	7408	7432	7404
GND-7	GND-7	GND-7	GND-7
Vcc-14	Vcc-14	Vcc-14	Vcc-14

4-bit Calculator

IC List:

- ① one 7486 Quad 2-input XOR gate.
- ② three 7408 Quad 2-input AND gates.
- ③ one 7432 Quad 2-input OR gate.
- ④ two 7404 HEX inverting gates.

7486	7408	7432	7404
GND-7	GND-7	GND-7	GND-7
Vcc-14	Vcc-14	Vcc-14	Vcc-14