An arithmetic logic unit (ALU) is a digital electronic circuit that performs arithmetic and bitwise operations. It is a fundamental building block of many types of computing circuits, including the processor and new hardware building blocks. ALU designs, as well as the design of a 1-bit ALU and a 32-bit ALU. We then overview Logic Design - Department of Computer Science Hardware Design of an Arithmetic Logic Unit (ALU) - Electrical and electronic circuits, digital logic, and computer architecture. ALU control lines define a function to be performed on A and B. The arithmetic logic unit (ALU) is the brawn of the computer, the device that performs arithmetic operations. The arithmetic logic unit (ALU) is a digital circuit used to perform arithmetic and logic operations. An arithmetic logic unit (ALU) is a digital circuit used to perform arithmetic and logic operations. An arithmetic logic unit (ALU) is a digital circuit used to perform arithmetic and logic operations.