Summary of Useful Software Modules

Type Function Different input functions

Arithmetic:

COUNTER Change of output bits according to count. Count enable, Clock enable

Modulus counting

Synchronous clear and load

Up/Down counting
Can use various logical operations: <, >, =, ...

COMPARE Compare two numbers

ADD Add two numbers
MULT Multiply two numbers
DIVIDE Divide two numbers

Gates:

CONSTANT Defines a constant

MUXMultiplexes (chooses one output from several inputs)DECODEOutput bit high when input bus = decode number(truth table)Truth table to define logical operation (text code)

Storage:

FF Bussed D flip-flop Enable, clear, synchronous load functions

SYNCRAM Memory storage ROM (read only memory)

RAM (read and write memory)

DPRAM (dual port RAM)

SHIFTREG Shift register, shifts bits in storage register

Boldface type indicates most commonly used functions.