**Cyclone IV DSP Features**

* 15 pieces of 18 x 18 Embedded Multiplier (or 30 pieces of 9 x 9 embedded multiplier)
* Each embedded multiplier included input and output registers

A diagram of a multiplier block

Description automatically generated

**Cyclone IV Multiplier Block Architecture**

A data table with black text

Description automatically generated

**Cyclone IV Multiplier Block Various Operand Sign Representations and Results**

* Cyclone IV Multiplier Blocks are compatible with single 18 x 18 and two 9 x 9 independent multiplier process

A diagram of a multiplier

Description automatically generated

**Cyclone IV Embedded Single Multiplier Block Architecture (18 x 18)**

A diagram of a computer

Description automatically generated

**Cyclone IV Embedded Two Independent Multiplier Block Architecture (9 x 9)**

* Cyclone IV embedded multiplier speed specifications

A table with numbers and letters

Description automatically generated

**Cyclone IV Embedded Multiplier Speed Specifications**

**Cyclone IV Logic Elements Features**

* Logic Elements included 4 input Look Up Tables(LUT)
* LAB wide synchronous reset architecture
* Chip wide asynchronous reset architecture

A diagram of a computer system

Description automatically generated

**Cyclone IV Logic Elements Architecture**