A close-up of a blue circuit board

AI-generated content may be incorrect.

A computer screen shot of a computer

AI-generated content may be incorrect.

A computer chip with many different colored squares

AI-generated content may be incorrect.

A diagram of a computer chip

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

A computer screen shot of a computer

AI-generated content may be incorrect.

A diagram of a company

AI-generated content may be incorrect.

A diagram of a diagram

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

A diagram of a process flow

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Step 1: Synthesis

A computer screen shot of a computer

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a calculator

AI-generated content may be incorrect.

Width and height of core and die

A screen shot of a black square with blue lines

AI-generated content may be incorrect.

A diagram of a chip

AI-generated content may be incorrect.

A diagram of a cell division

AI-generated content may be incorrect.

When core is 100% utilized no space is left for any new cell addition, for any real world

Example only 60-80% utilized.

When aspect ratio is 1 chip is said to be in square shape

When aspect ratio is <1 eg:0.5 chip is said to be in rectangular shape

A black background with white text

AI-generated content may be incorrect.

The remaining area can be used for adding buffers

A diagram of a number of units

AI-generated content may be incorrect.

A diagram of a square with white lines

AI-generated content may be incorrect.

A black background with white text

AI-generated content may be incorrect.

25% is utilized

A black and white text

AI-generated content may be incorrect.

A black background with white text

AI-generated content may be incorrect.

If aspect ratio is 1 it is supposed to be a square chip

A black and white sign with white text

AI-generated content may be incorrect.

Power planning - eg: 16 bit line with decoupling capacitor

A diagram of electrical wiring

AI-generated content may be incorrect.

Multiple power supplies solves the issue (vdd,vss)

A diagram of electrical circuits

AI-generated content may be incorrect.

A diagram of power planning

AI-generated content may be incorrect.