Today, tens of thousands and thousands of products - cars, washing machines, smartphones, and more - depend on computer chips, also called semiconductors.

Right now , they are not enough chips to meet demand . This have have reduced product of many products .

Silicon is the most frequently used semiconductor because of it’s abundane but recent demand and supply made it to reach theoretical limit of silicon do .

**The revolution we need in chip industries**

They are some materials we can use make chips, to revolutionize chip industries for example : gallium arsenide

Gallium arsenide (GaAs) could be used to produce chips and will be transition chip industries because gallium arsenide (GaAs) have electronic properties that are superior to that of silicon .

●GaAs has higher saturated electron velocity and high mobility. allowing gallium arsenide transistors to function at frequencies in excess of 250 GHz.

● GaAs has high wage of band gap , this makes it’s device insensitive to overheating

● Another advantage of GaAs is that it has a direct band gap, which means that it can be used to absorb and emit light efficiently. Silicon has an indirect band gap and so is relatively poor at emitting light.

Using GaAs for making most chips will helps to reduce reliance on silicon and it will help to need demand in chip industries.