Moore’s law predicted that the number of transistors would double for every 2 years. The barrier that stops. The first constraints that stop Moore’s law is power consumption. As the number of transistors in a single chip goes up, the power consumption also increases and lead to releasing of high temperature from the chip due to the leakage power loss. The solution nowadays is using air cooling, but air also have limit about how much heat it can remove from the chip. Second, to lower the power consumption that voltage swing that determine digital bit must be decreased. But the voltage swing can be as low as certain level because the noise in the system that would ease all the important bit.