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flash memories in market,

By type :- NAND flash memory
 NOR " " "

By Component :- Memory Chips
 Flash Controller

By Application :- Smartphone, Digital Camera
 USB flash drives.

By end-user :- Enterprise, Individual,
 Industrial

Companies Covered:

Toshiba Technologies Am
Intel Corporation

Micron Technology Inc.

Microchip Technology Inc.

Realtek Technology INC.

and more,

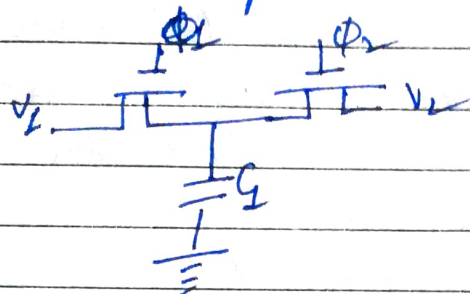
NOR - Flash Memory

In NOR flash, each cell has one end connected directly to ground, and the other end connected to a bit line. This arrangement is called "NOR flash" because it acts like a NOR gate, which one of the word lines is brought high, the corresponding storage acts to pull the output bit line low. NOR flash continues to be the technology of choice of embedded applications requiring a discrete non-volatile memory devices.

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A switched capacitor is an electronic element used in discrete time signal processing systems. It works by transferring charge into and out of a capacitor when switches are opened and closed.

Switched Capacitor as resistor,



$$V_1 \xrightarrow{R_{eq}} V_2$$

$$R_{eq} = \frac{T}{C_1}$$

$$\Delta Q = C_1(V_1 - V_2) \text{ every clock period}$$

$$I = \frac{dq/dt}{T} = \frac{\Delta Q}{T} = C_1(V_1 - V_2)/T$$

Comparing this to

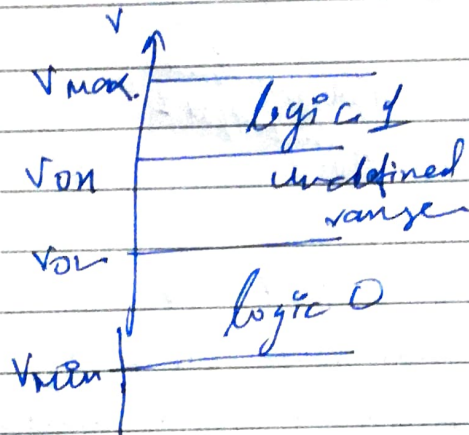
$$I = \frac{V_1 - V_2}{R_{eq}}$$

$$R_{eq} = \frac{T}{C_1}$$

Since time constants can be set by the ratio of capacitor, very accurate filter response became possible using switched capacitor techniques.

3. Assisted buffering transceiver logic (ABTL)
differs from conventional buffering transceiver logic (bTL) in that the ABTL driver assists the bus terminator in pulling the bus up to the specified voltage.

In digital circuits, digitally encoded information is represented by means of two distinct ranges.



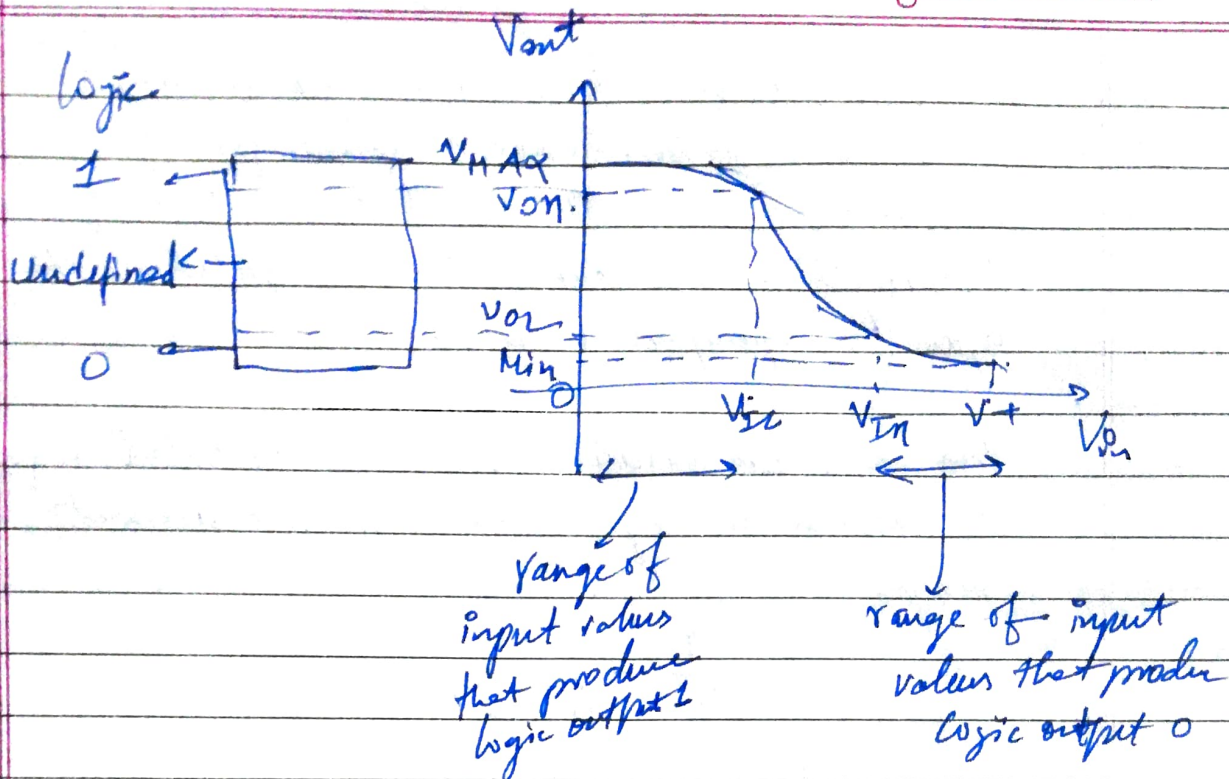
The state definition :-

$$\text{Logic 0} : V_{min} \leq V \leq V_{OL}$$

$$\text{Logic 1} : V_{OH} \leq V \leq V_{max}$$

$$\text{Undefined logic} : V_{OL} \leq V \leq V_{OH}$$

Two other important Voltages :-



If range of output values V_{OL} to V_{ON} is wider than the range of input values V_{IL} to V_{IH} , then the inverter exhibits some noise immunity ($|V_{OL} - V_{ON}| > 1$)