



Line Coding scheme 5 types unipolar, Bipolar, multilevel, multiline.

Now, compare among the three line coding schemes.

i) Bipolar → schema (AMI), Band width (average)

$B = N/2$. No self - synchronization
for long ~~some~~ Os, DC.

ii) Unipolar → schema (NRZ), $B = N/2$. Costly
no self - synchronization if long
Os or 1s, DC.

iii) Multilevel → schema MLT-3. $B = N/3$. No
self - synchronization for long Os.

~~get think~~ Multiline seems is better.

Pa-2

Ans. to the Q.no-2

my birthday = 16/08/1997

$$(1608)_{10} = (0101001000)_2$$

my id= 18101026 (even but not divisible by 3)
implement

a) differential Manchester.

b) 2B1Q

c) AMI

b) 2B1Q \rightarrow its schema . Bandwidth (average) is $B = N/4$.

NO self - synchronization for long same double bits.

c) AMI \rightarrow Bandwidth, $B = N/2$.

NO self - synchronization for long Os , DC.

$$\begin{array}{r} 1608 \\ \hline 2 | 804 & 0 \\ 2 | 402 & 0 \\ 2 | 201 & 0 \\ 2 | 100 & 1 \\ 2 | 50 & 0 \\ 2 | 25 & 0 \\ 2 | 12 & 1 \\ 2 | 6 & 0 \\ 2 | 3 & 1 \\ 2 | 0 & 0 \\ \hline \end{array}$$

Pa-3

a) differential Manchester:

$$(1608)_{10} = (0101001000)_2$$

differential
manchester.

