



$S_0 \rightarrow$  blank for 0000  
 $S_1 \rightarrow$  middle dot  
 $S_{11} \rightarrow$  middle dot  
 $S_2 \rightarrow$  small square  
 $S_{10} \rightarrow$  small square  
 $S_3 \rightarrow$  big square  
 $S_4 \rightarrow$  blank for  $SS > 0000$   
 $S_5 \rightarrow$  1 bar signal  
 $S_6 \rightarrow$  2 bar signal  
 $S_7 \rightarrow$  3 bar signal  
 $S_8 \rightarrow$  4 bar signal  
 $S_9 \rightarrow$  5 bar signal

7 bit input converted to 3 bit

$000 \rightarrow$  for zero ss  
 $001 \rightarrow$  for  $1 \leq ss \leq 20$   
 $010 \rightarrow$  for  $21 \leq ss \leq 40$   
 $011 \rightarrow$  for  $41 \leq ss \leq 60$   
 $100 \rightarrow$  for  $61 \leq ss \leq 80$   
 $101 \rightarrow$  for  $81 \leq ss \leq 100$