

Enseignes et afficheurs à LED

# Registres série-parallèle

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Pierre-Yves Rochat

- Besoin de broches
- Registre série
- Registre série-parallèle
- Le circuit 74HC595
- Sorties à courant constant
- Programmation

# Besoin de broches

- Beaucoup de LED...

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- Beaucoup de LED...
- Beaucoup de broches !
- Circuits logiques

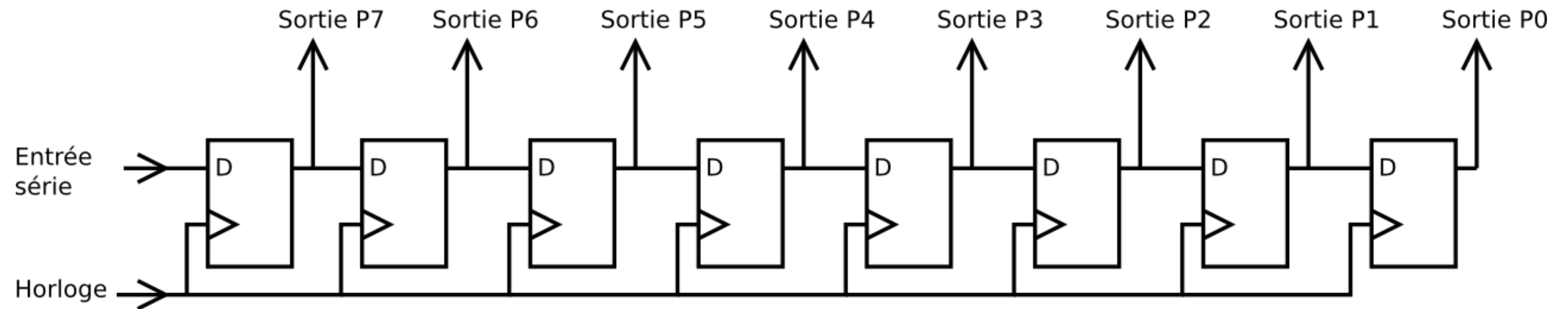
# Besoin de broches

- Beaucoup de LED...
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- Circuits logiques
- Latch adressables (74HC259)

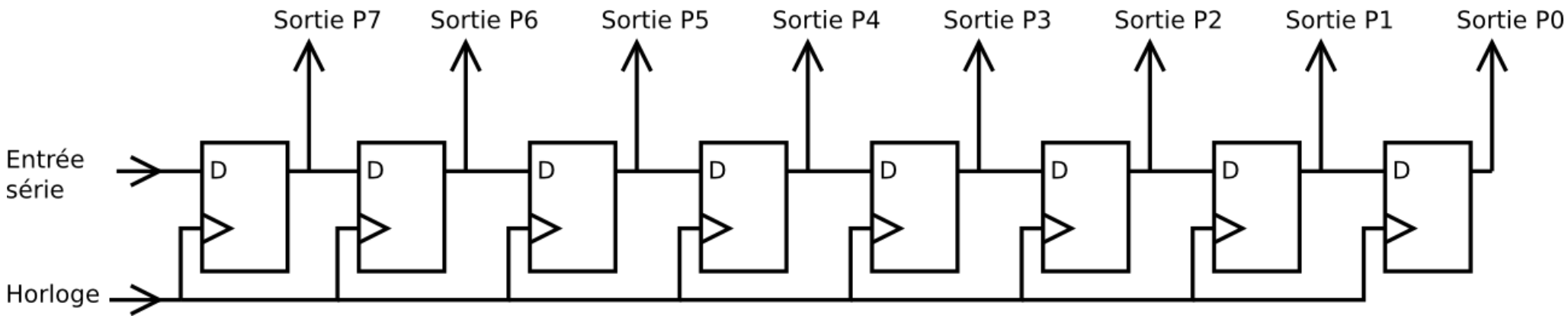
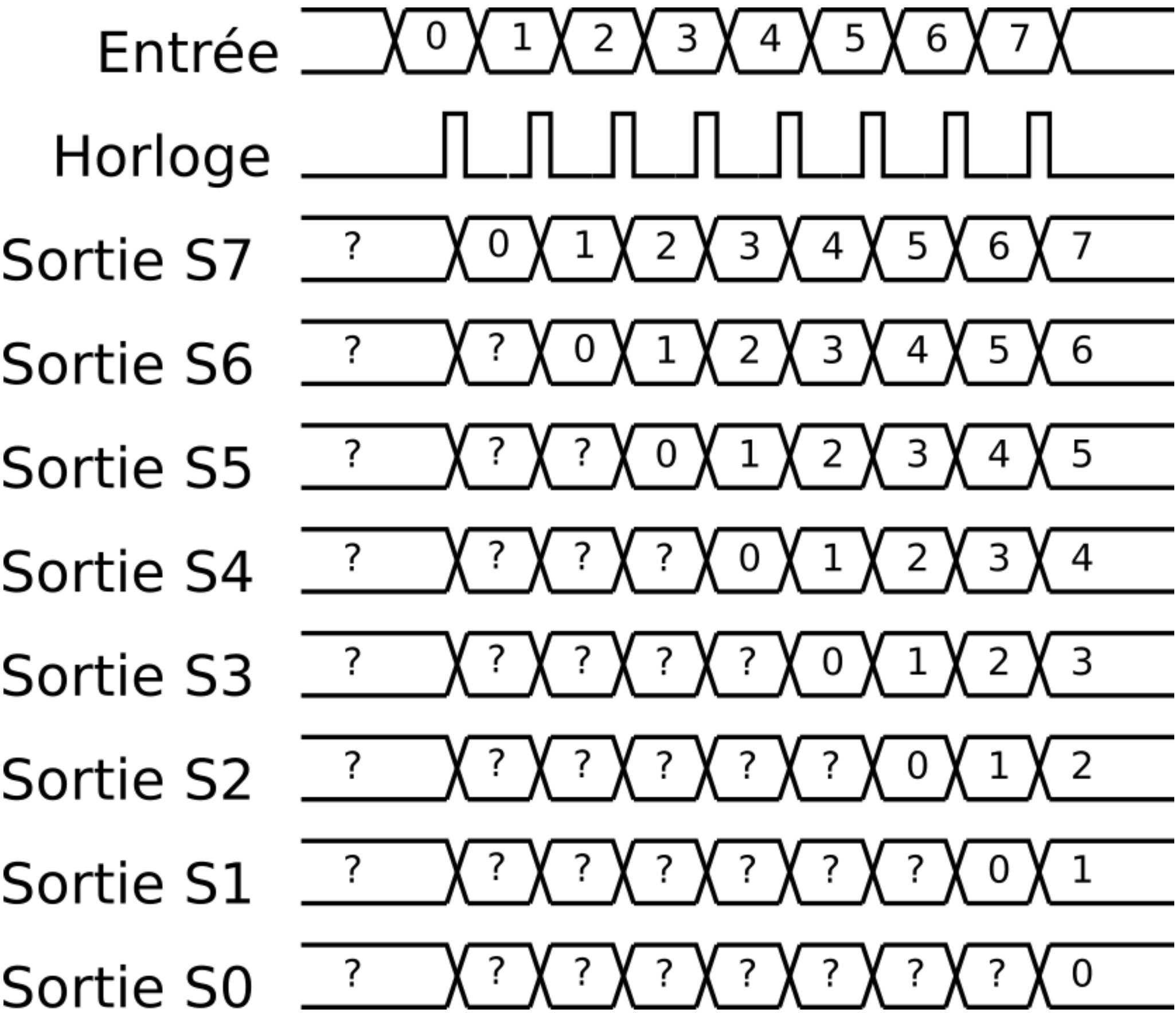
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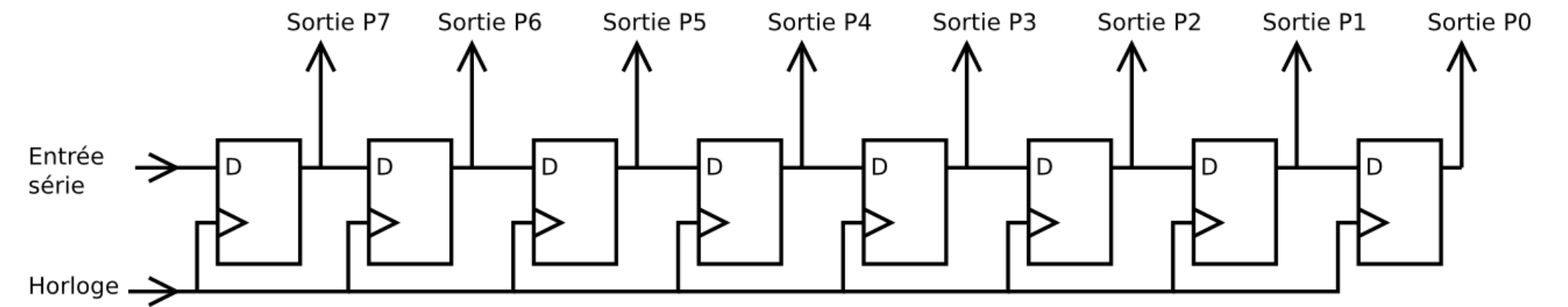
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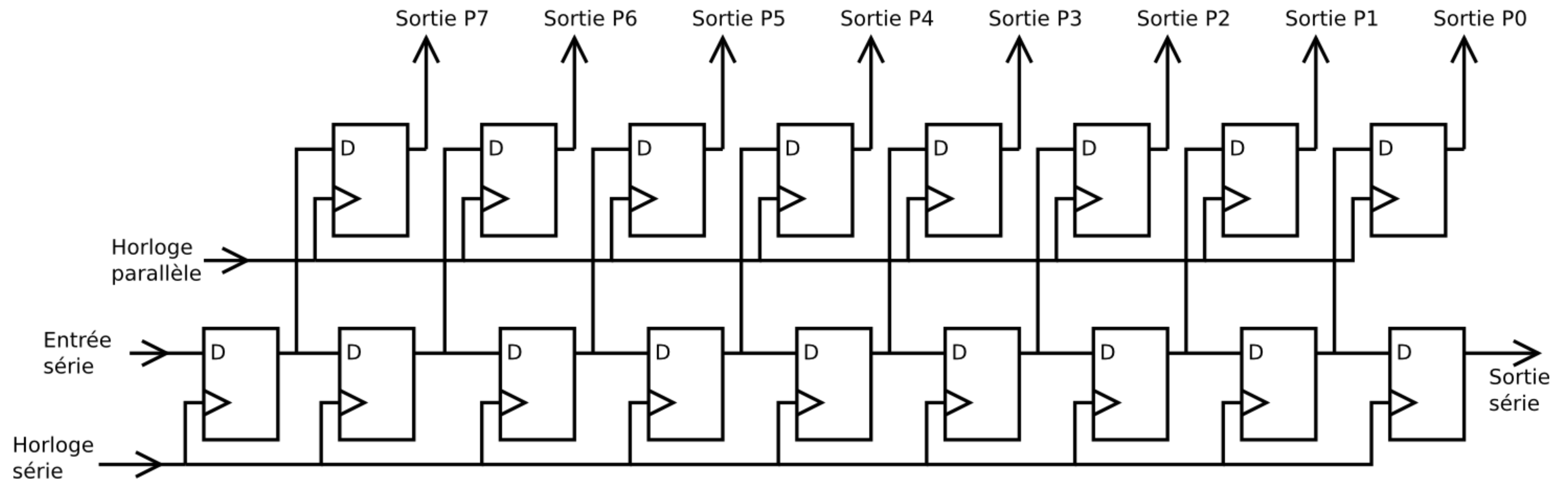
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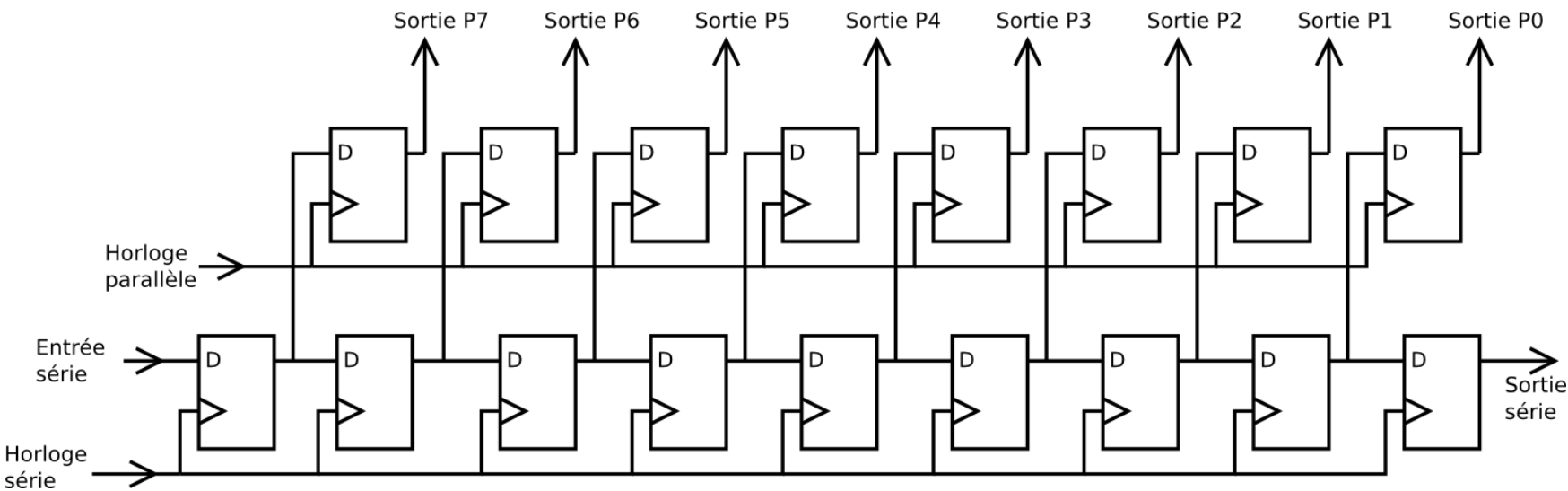
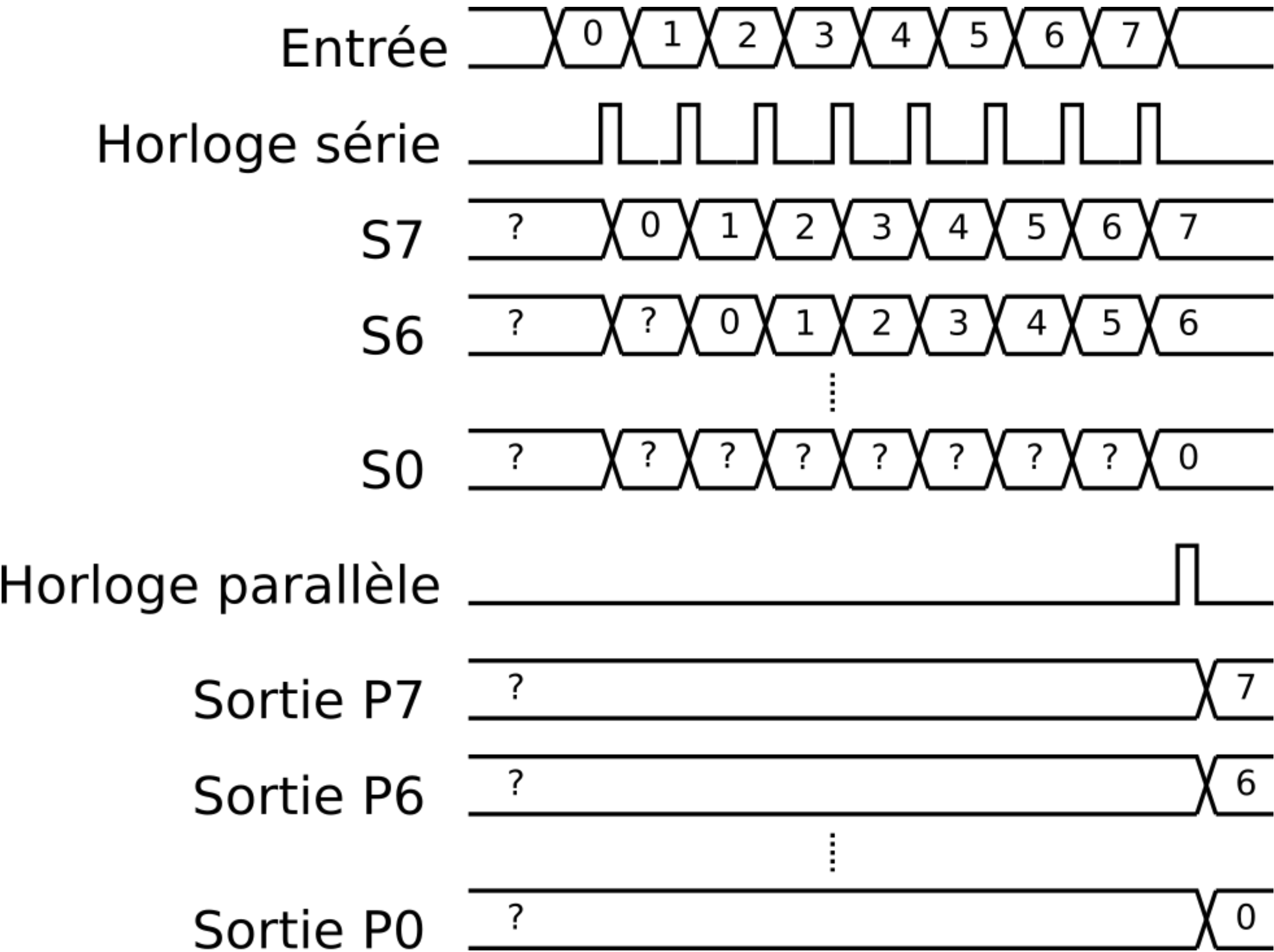
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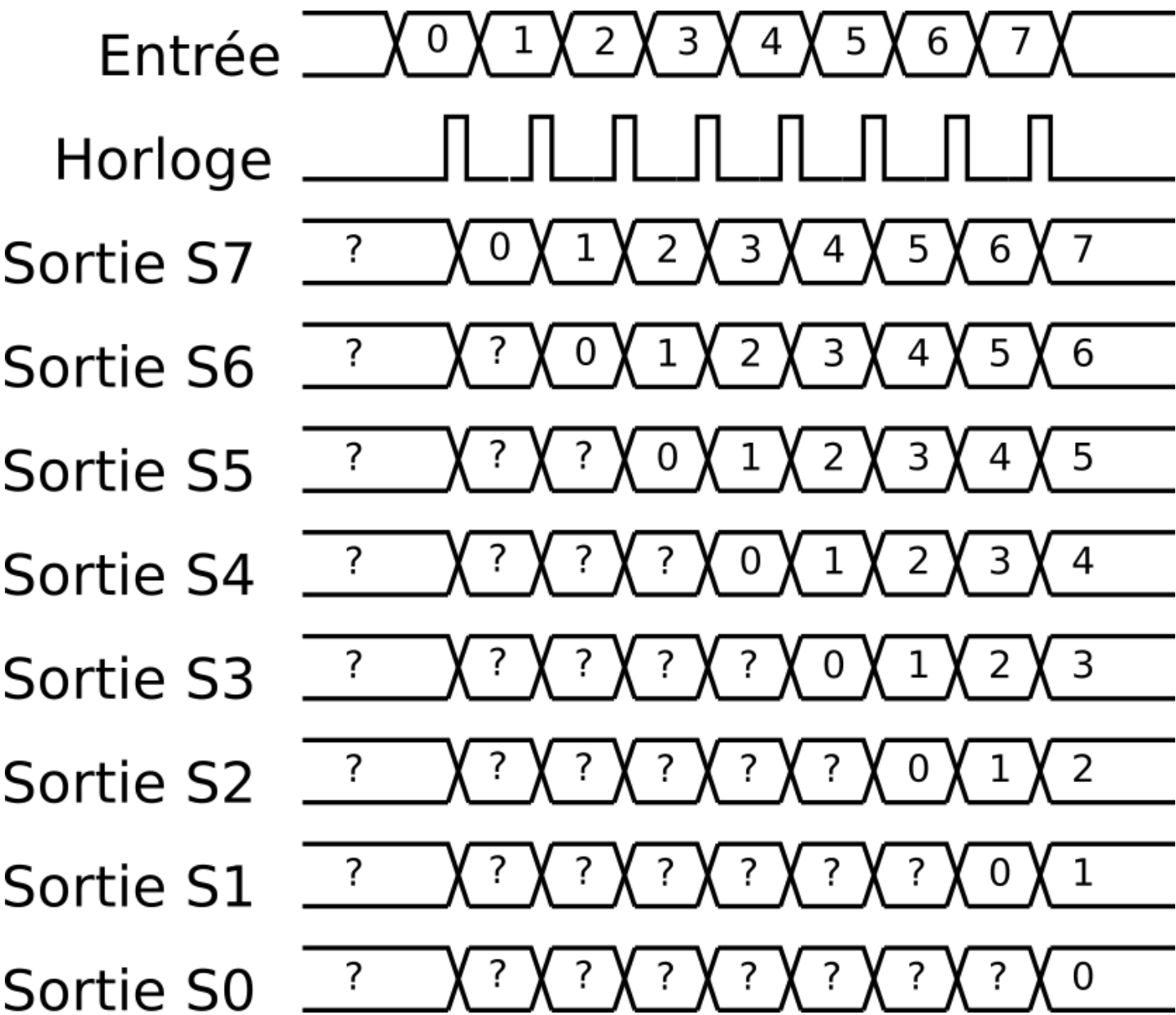
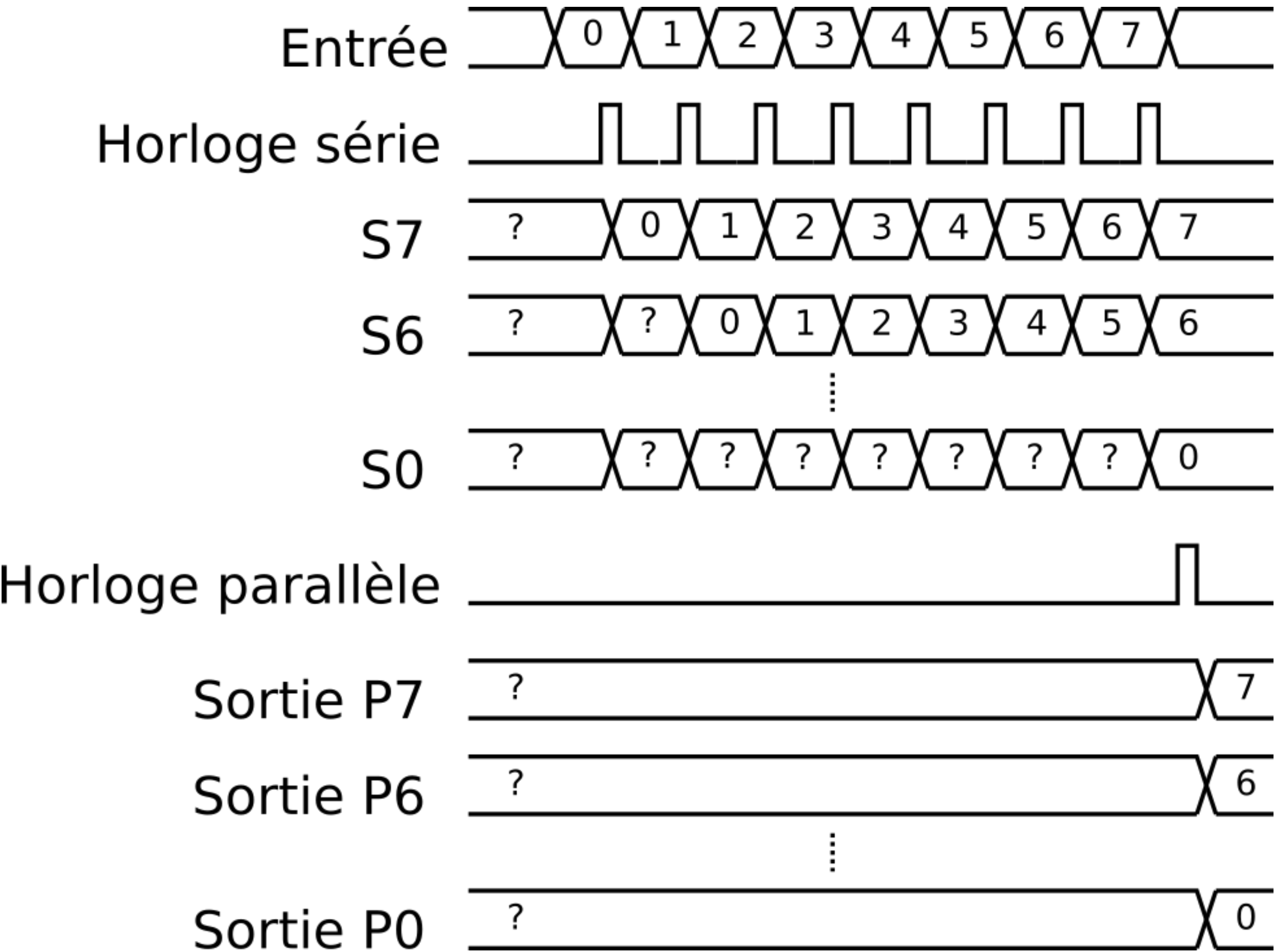
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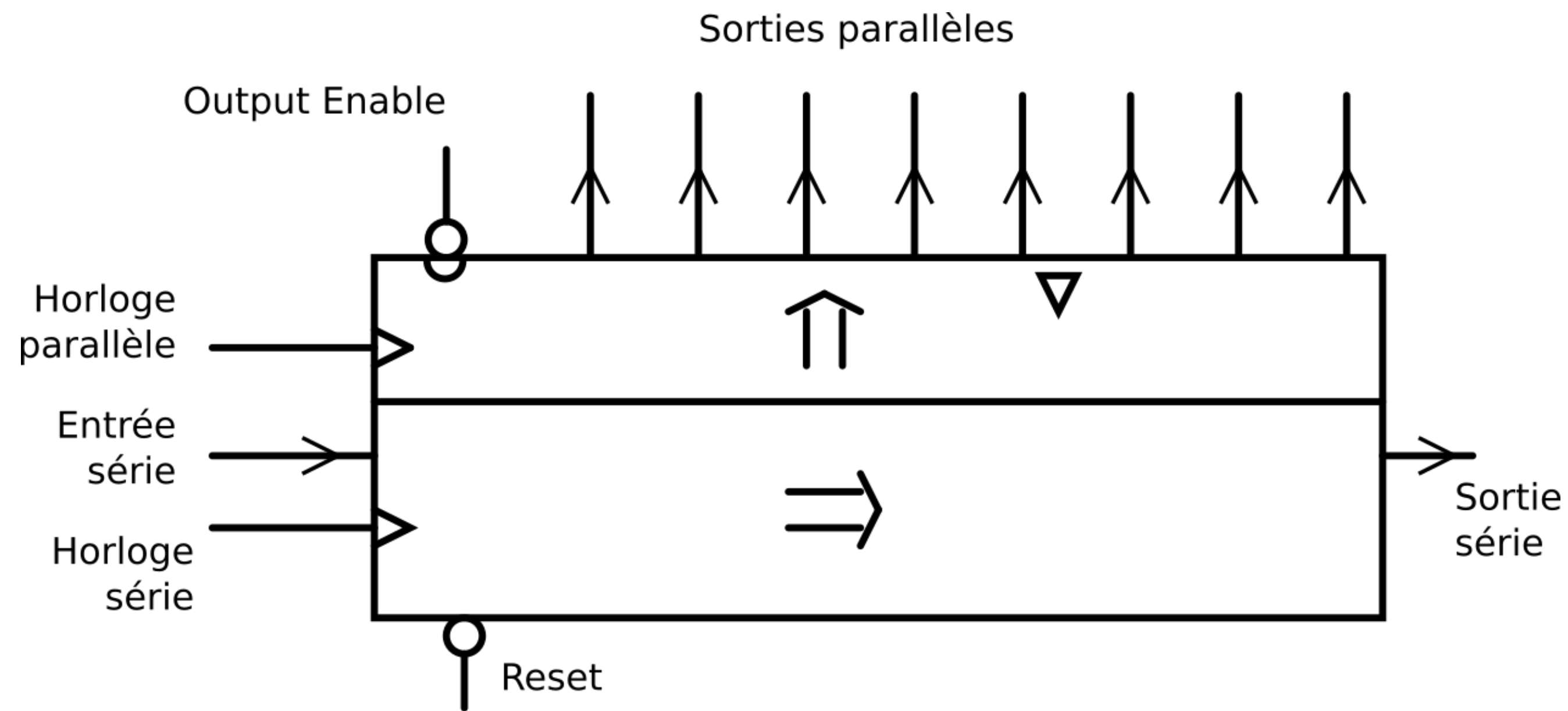
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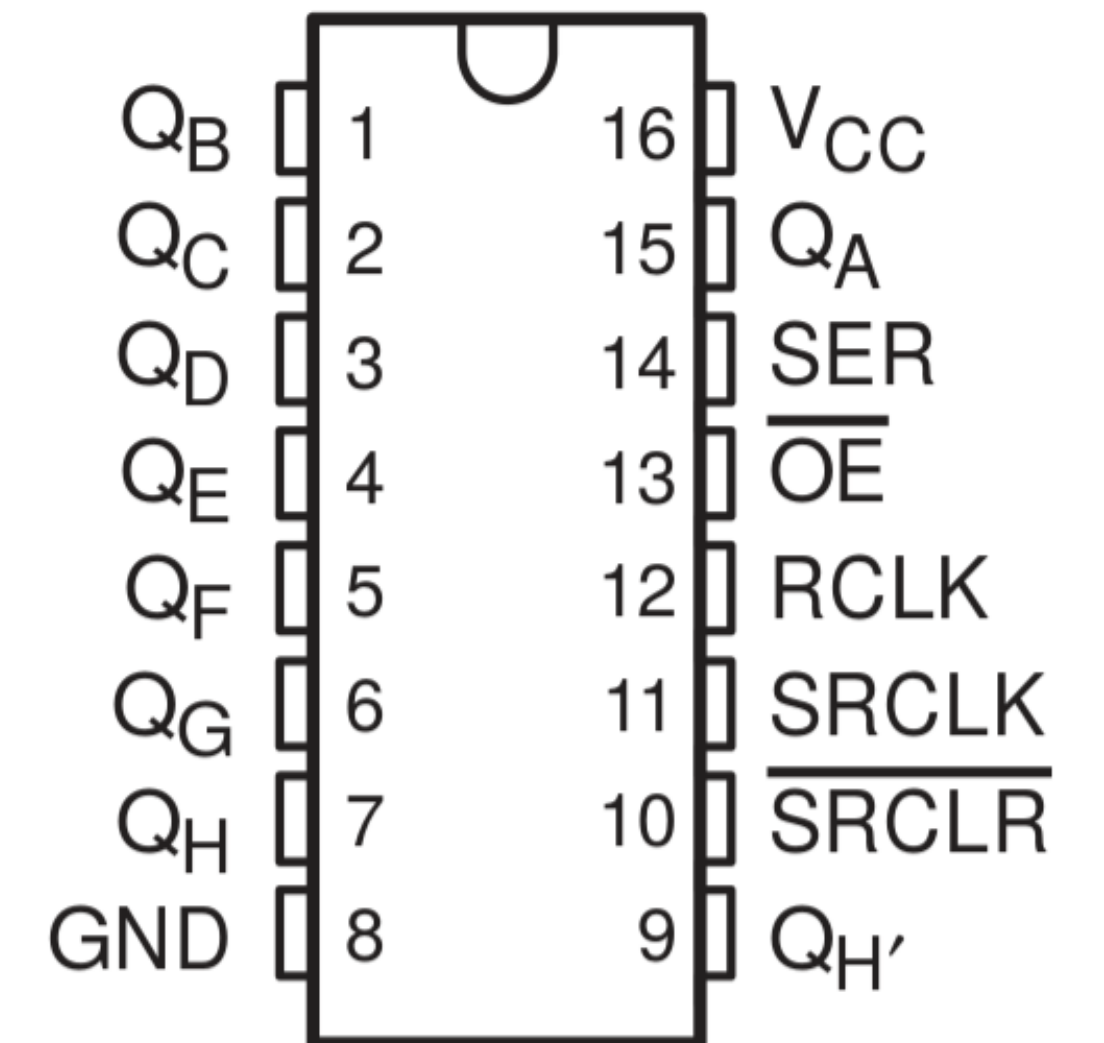
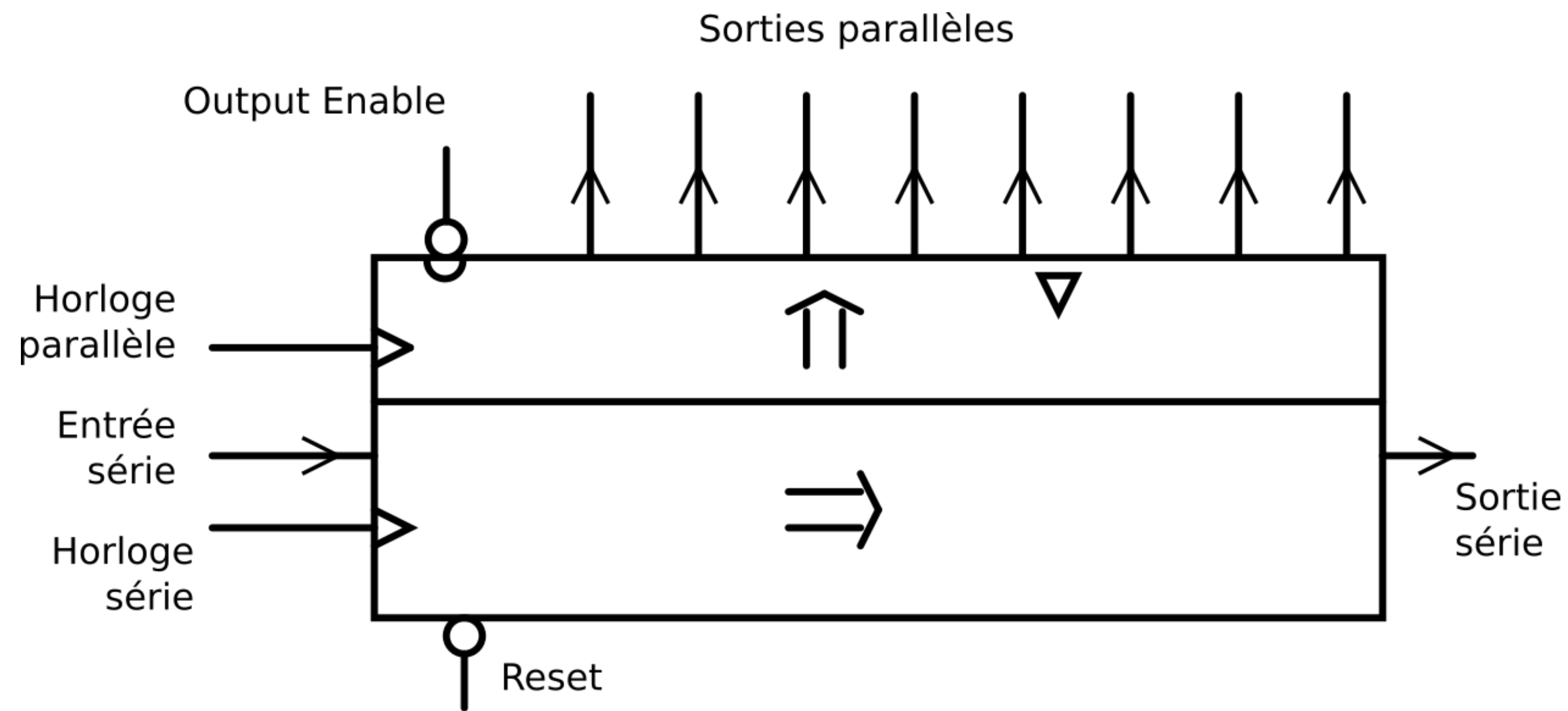


# 74HC595



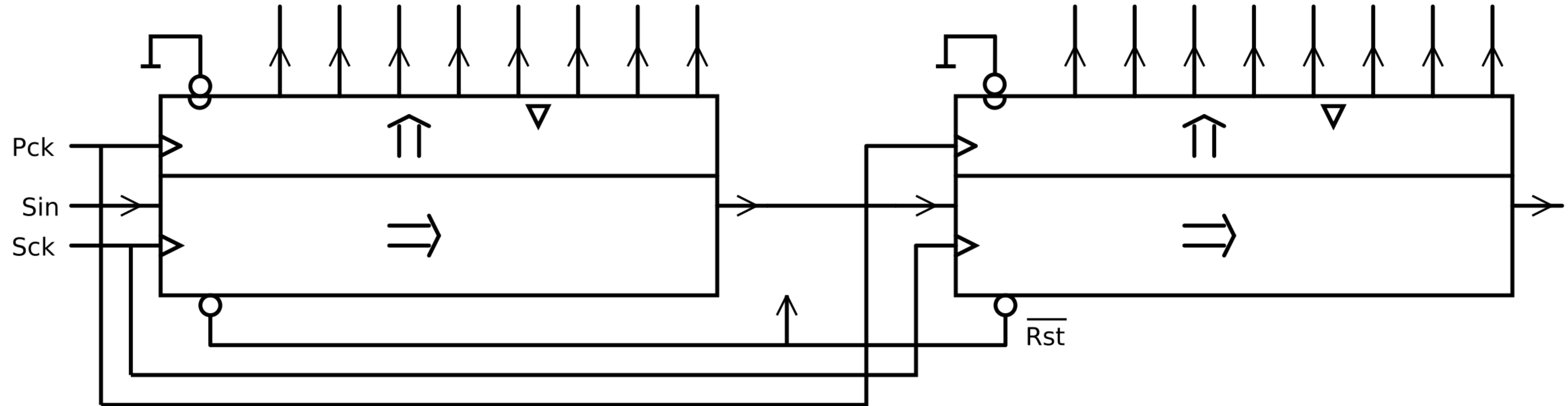


# 74HC595

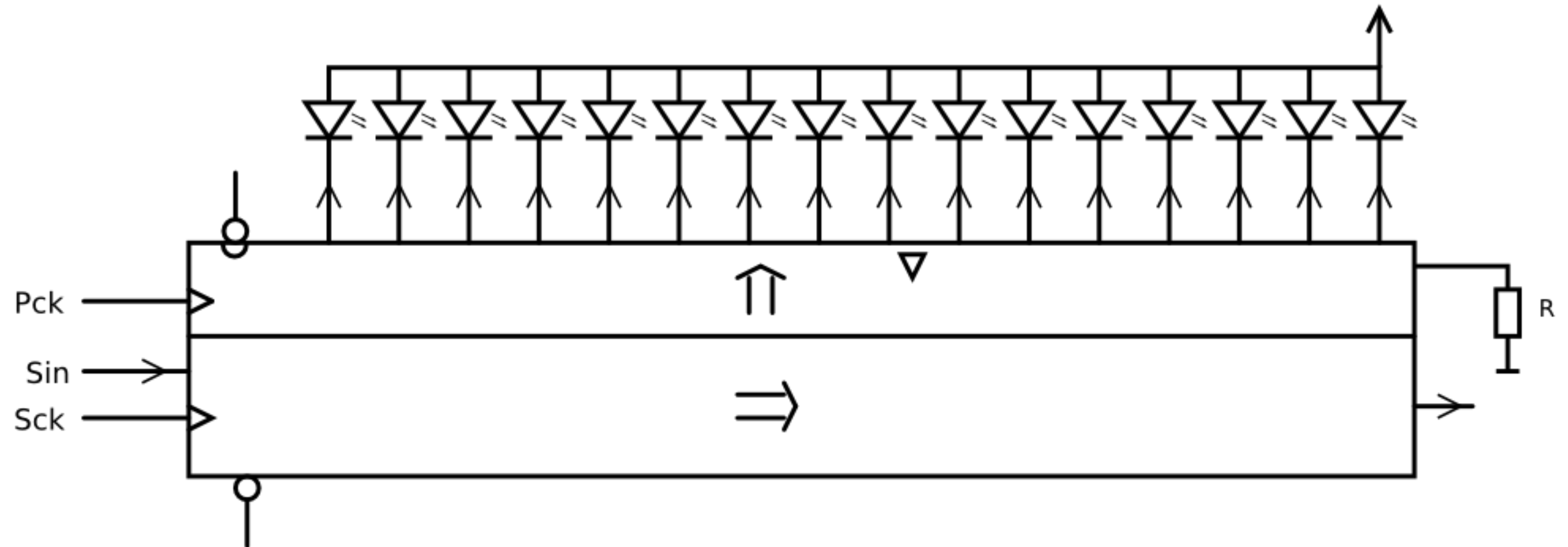




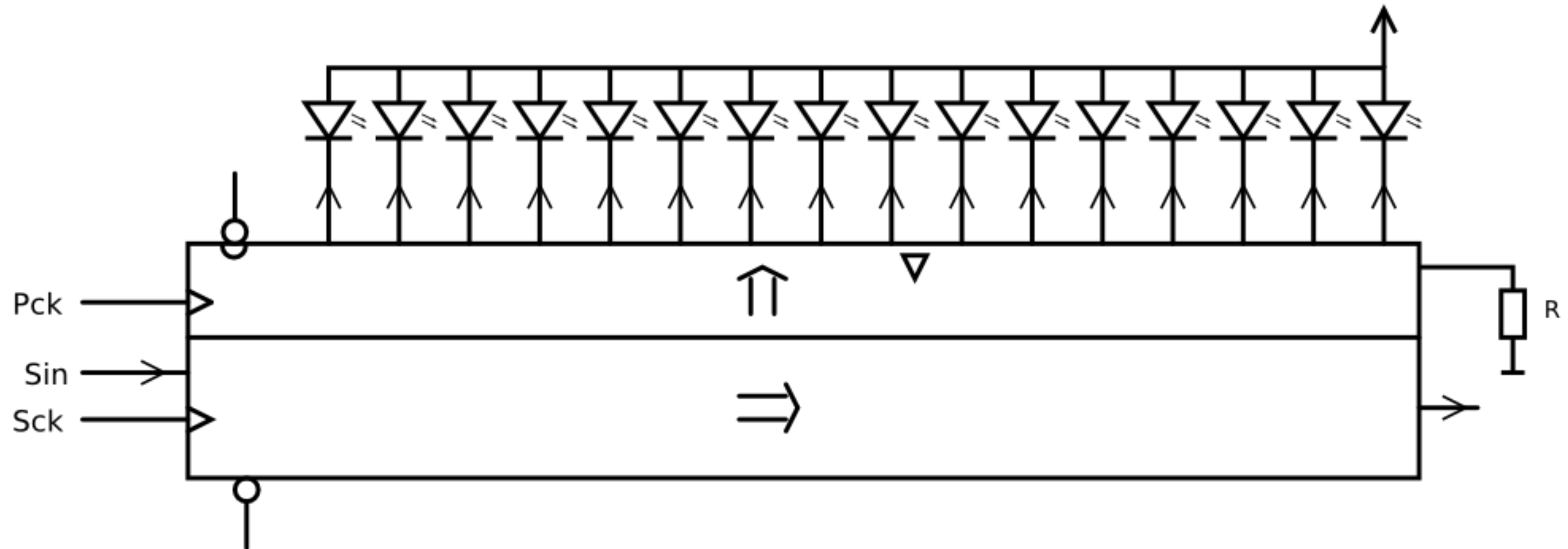
# Registres en cascade



# Registres à sorties à courant constant

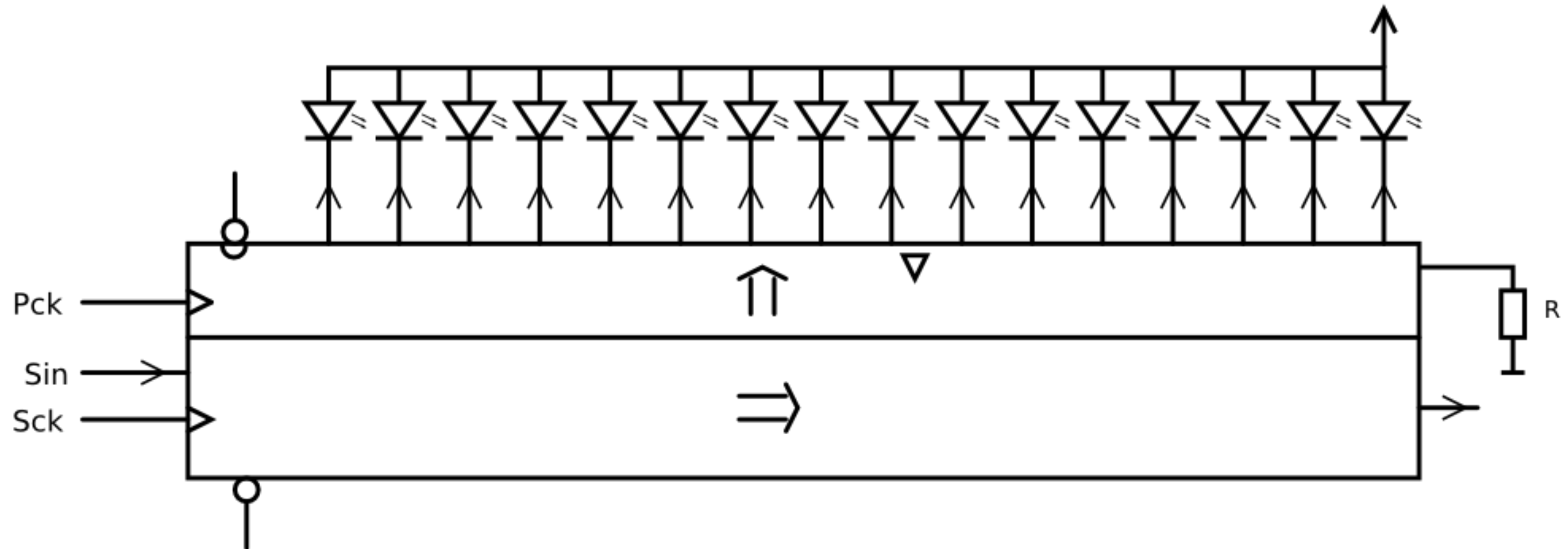


# Registres à sorties à courant constant



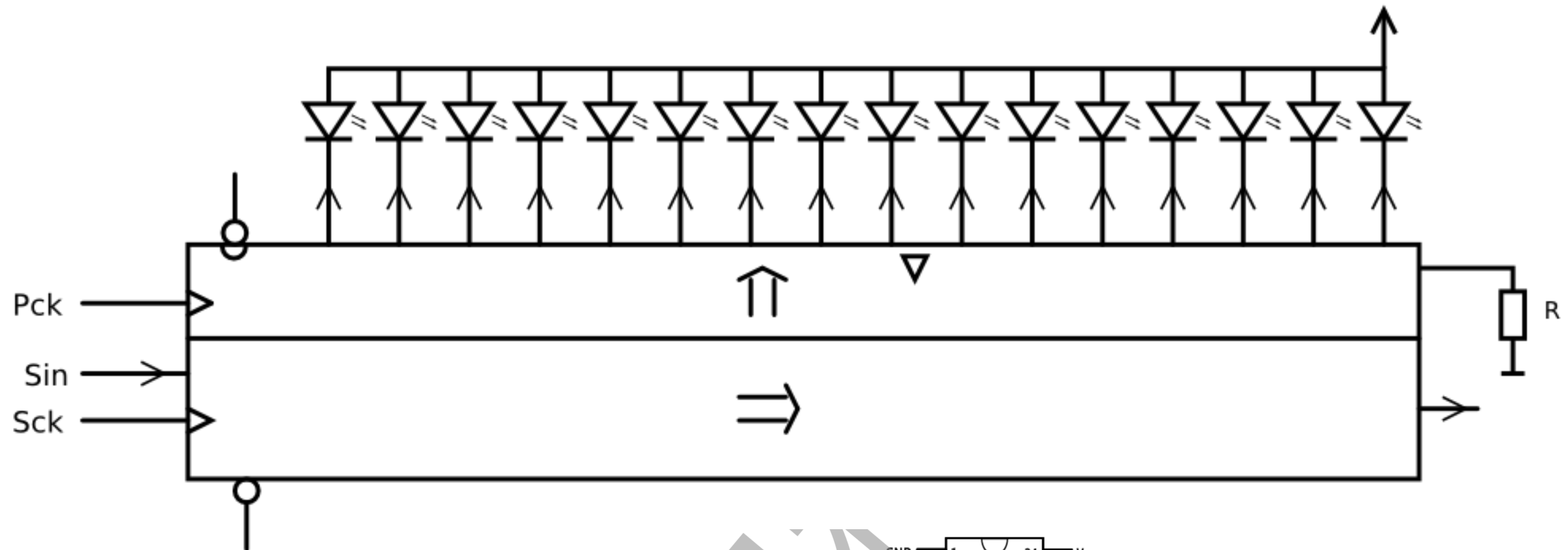
- TB62701, TLC5905, A6276...

# Registres à sorties à courant constant



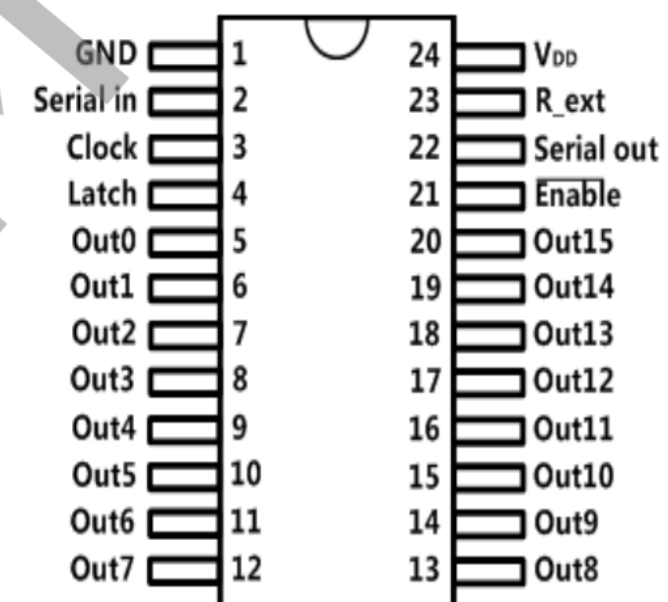
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- SUM2016 !

# Registres à sorties à courant constant

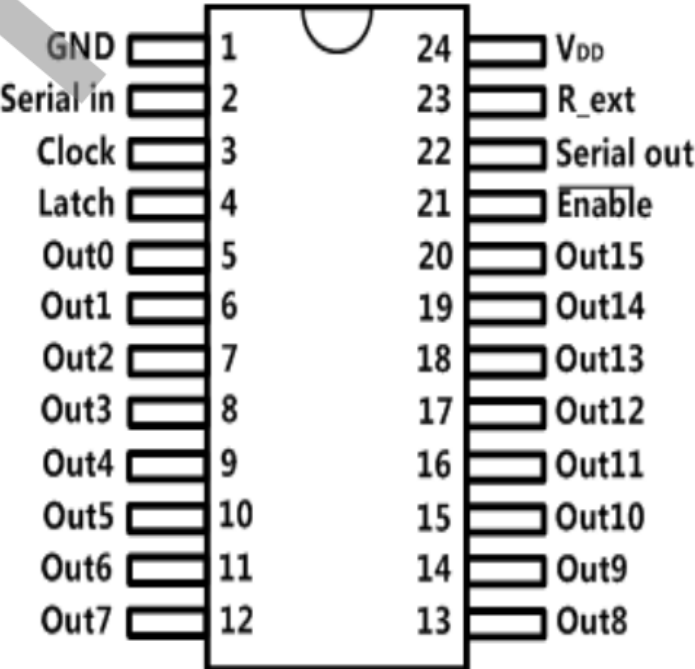


- TB62701, TLC5905, A6276...
- SUM2016 !

户内/户外全彩视频 LED 显示屏  
交通指示屏，文字信息显示屏  
招牌和标识 装饰照明，护栏管  
LCD 背光源



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```
1 #define SortieSerieOn P10UT |= (1<<0)
2 #define SortieSerieOff P10UT &=~(1<<0)
3
4 #define ClockSerHaut P10UT |= (1<<1)
5 #define ClockSerBas P10UT &=~(1<<1)
6
7 #define ClockParHaut P10UT |= (1<<2)
8 #define ClockParBas P10UT &=~(1<<2)
```

```
10 void Envoie8bitsSerie (uint8_t valeur) {
11     uint16_t i;
12     for (i=0; i<8; i++) {
13         if (valeur & (1<<i)) {
14             SortieSerie0n;
15         } else {
16             SortieSerie0ff;
17         }
18         ClockSerHaut; ClockSerBas;
19     }
20     ClockParHaut; ClockParBas;
21 }
```



```
11 ...
12  for (i=0; i<8; i++) {
13      if (valeur & (1<<0)) {
14          SortieSerie0n;
15      } else {
16          SortieSerie0ff;
17      }
18      ClockSerHaut; ClockSerBas;
19      valeur = valeur >> 1;
20 ...
```

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