

Enseignes et afficheurs à LED

Registres série-parallèle

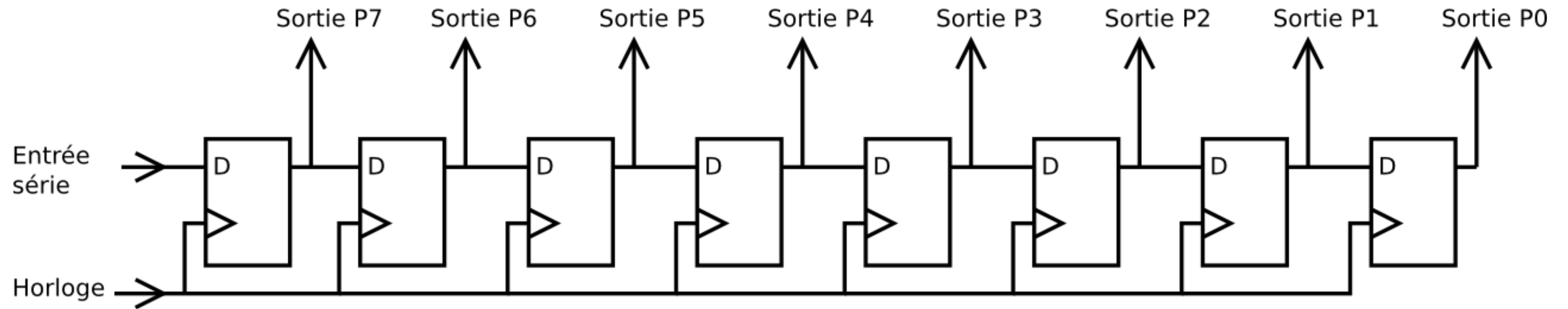
Registres série-parallèle

Pierre-Yves Rochat

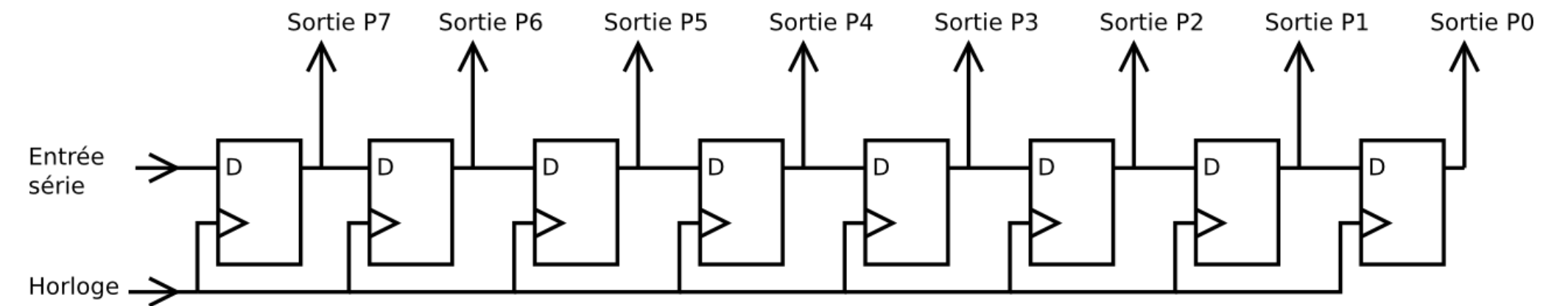
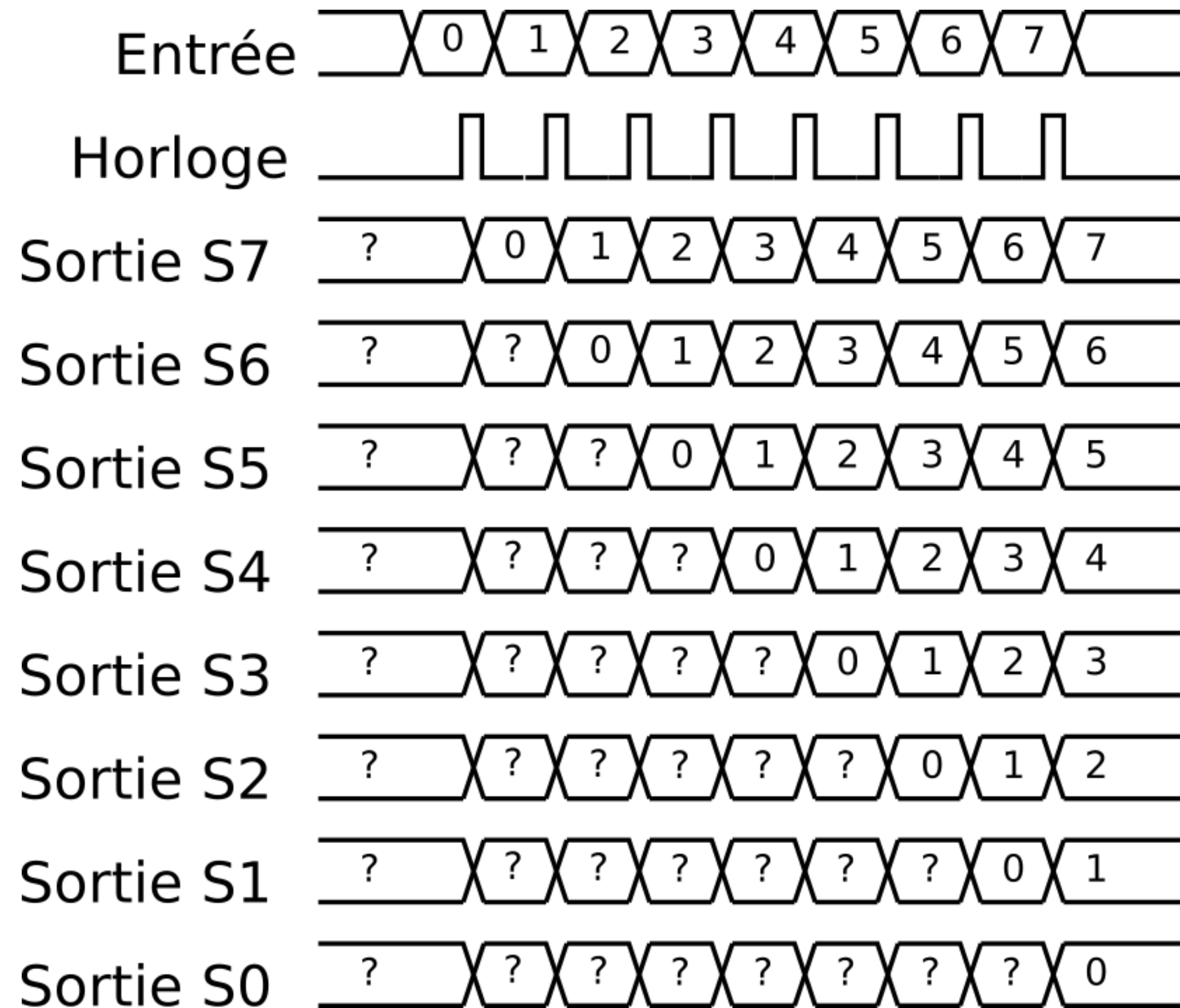
- Besoin de broches
- Registre série
- Registre série-parallèle
- Le circuit 74HC595
- Sorties à courant constant
- Programmation

- Beaucoup de LED...
- Beaucoup de broches !
- Circuits logiques
- Latch adressables (74HC259)
- Registres série-parallèle (74HC595)

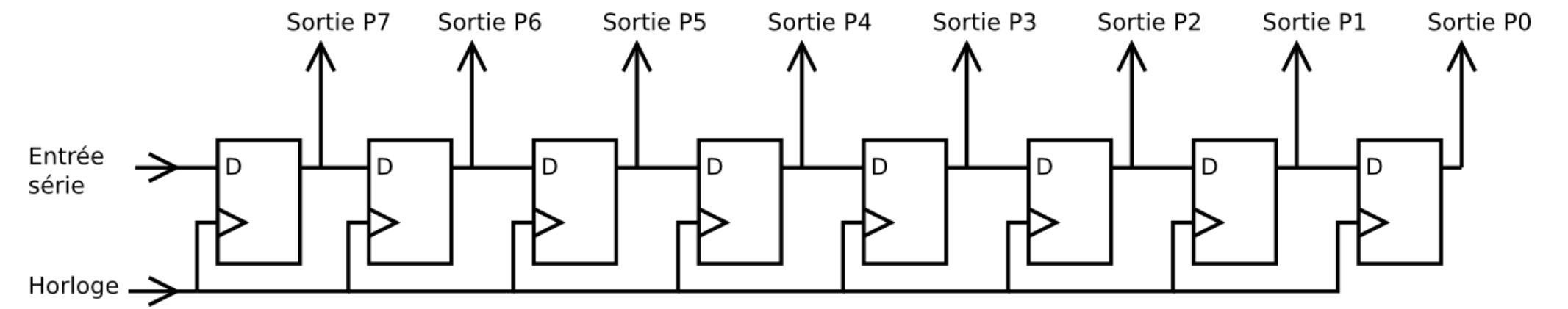
Registres série



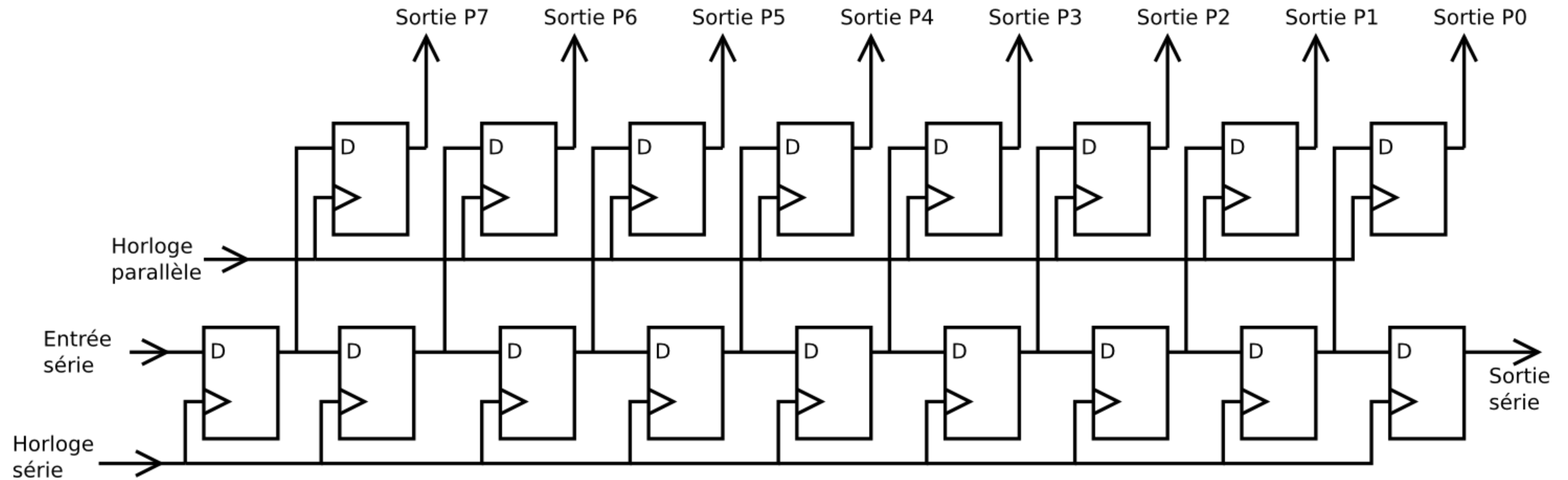
Registres série



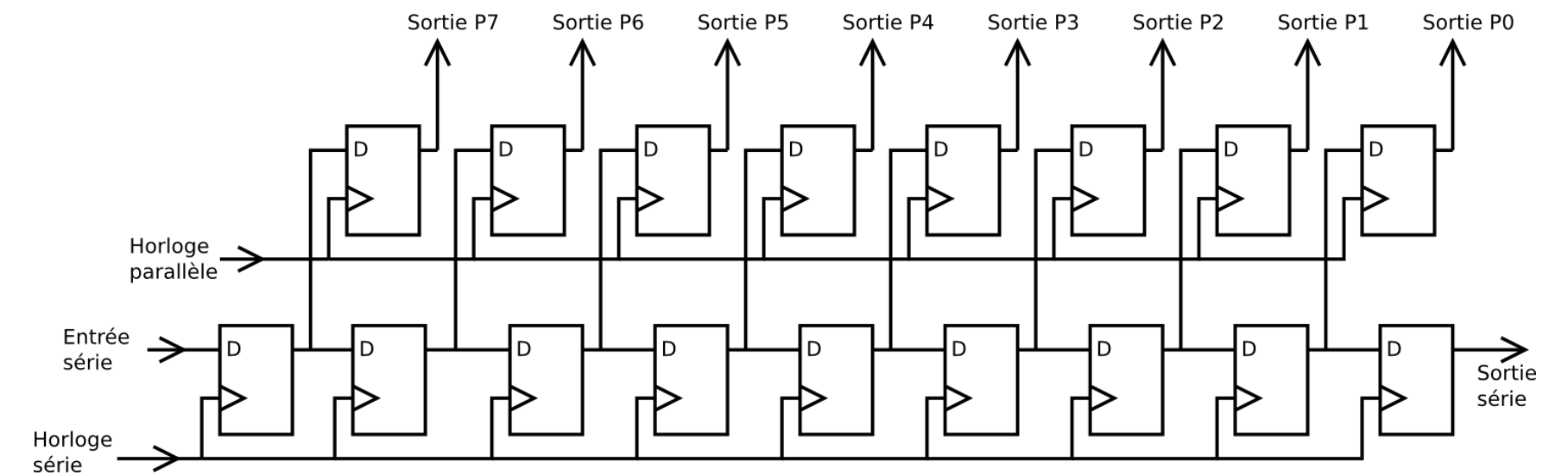
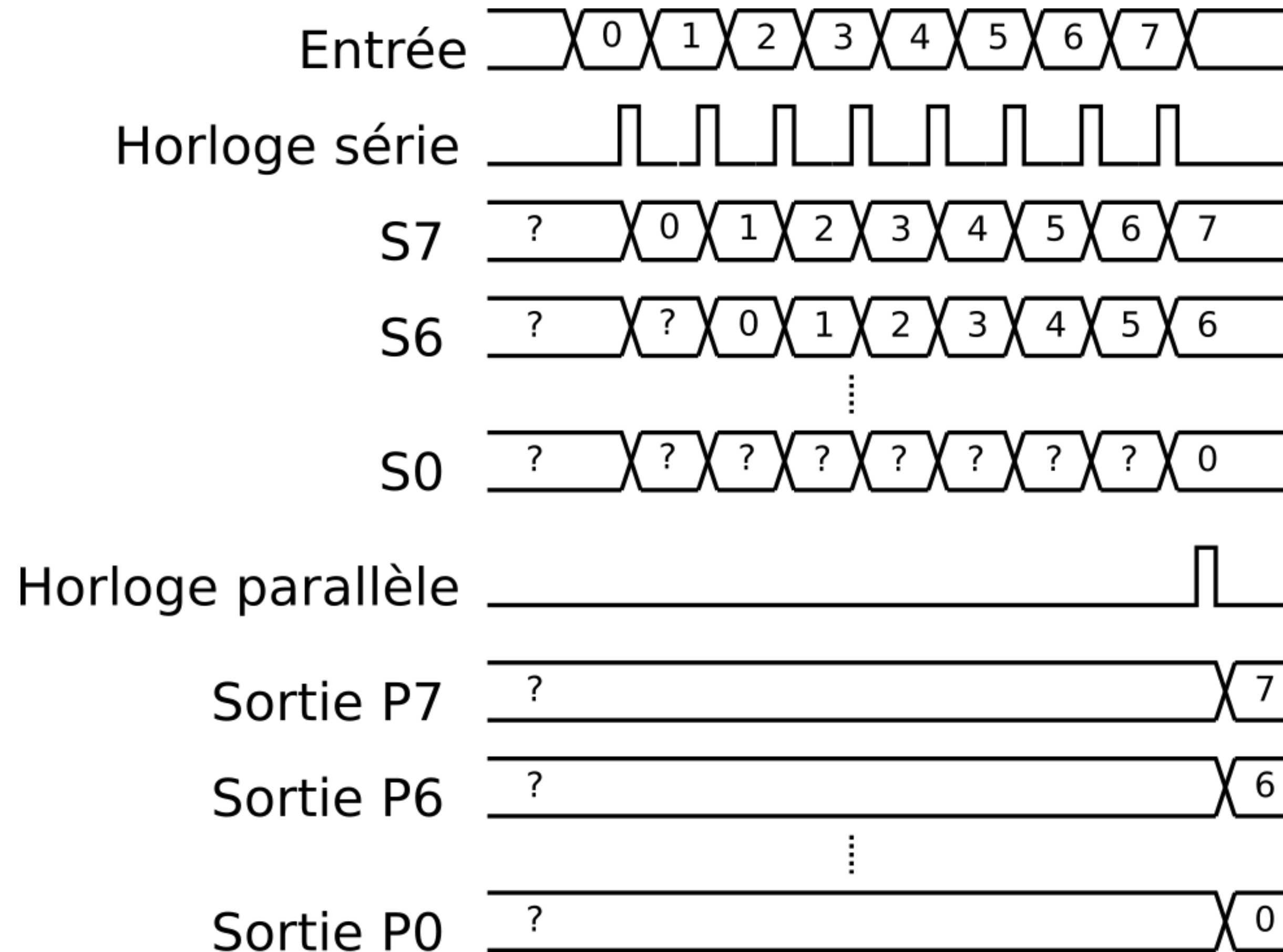
Registres série-parallèle



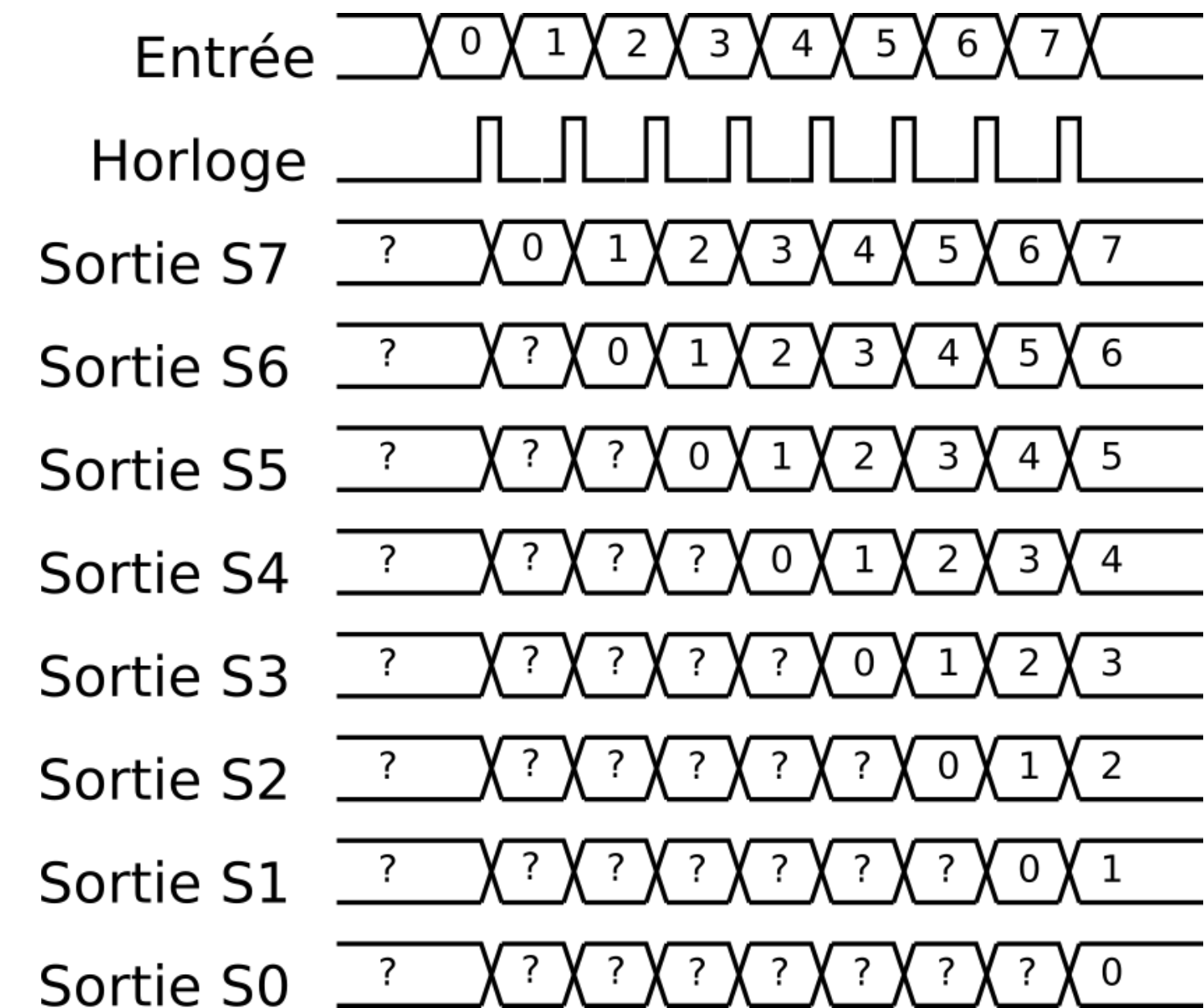
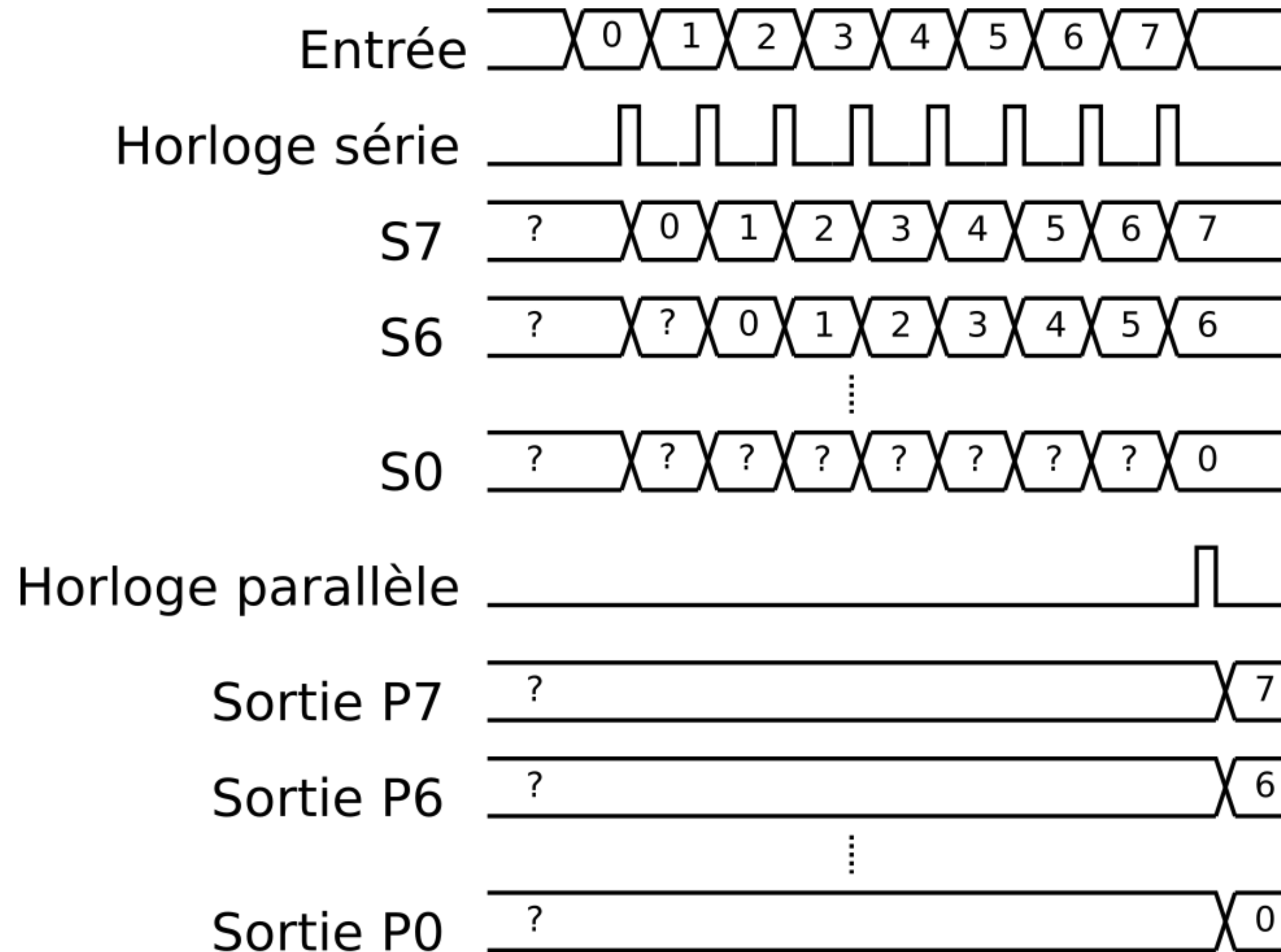
Registres série-parallèle



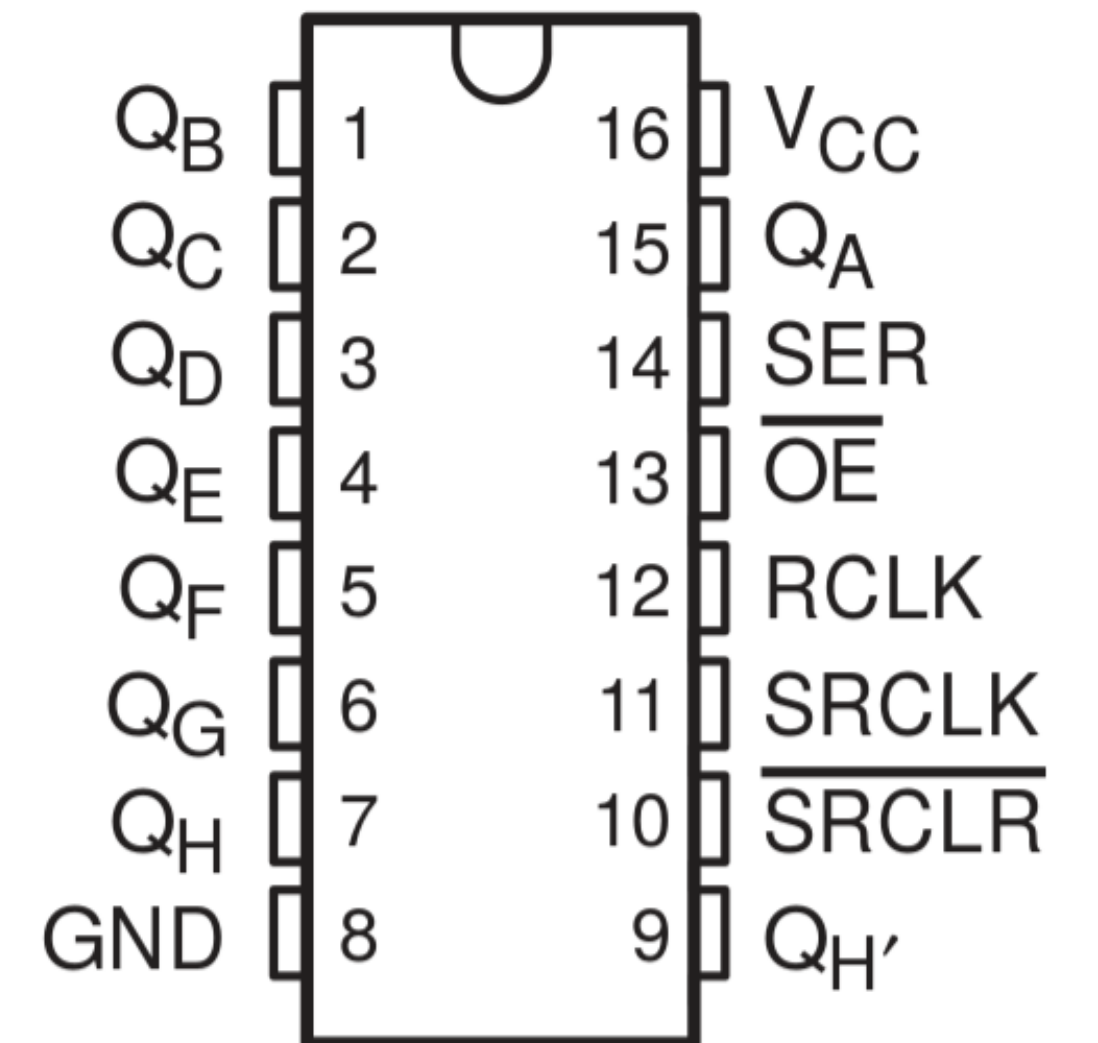
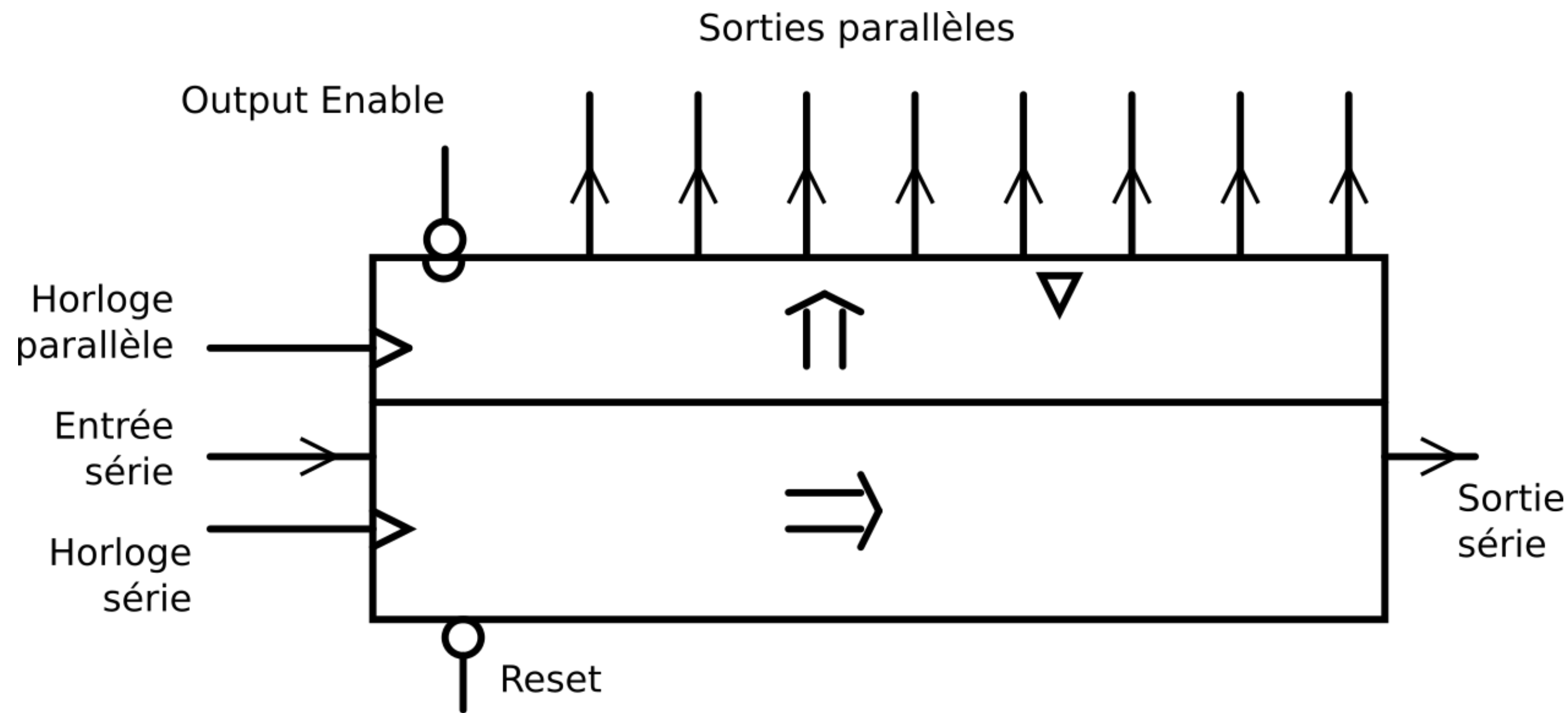
Registres série-parallèle



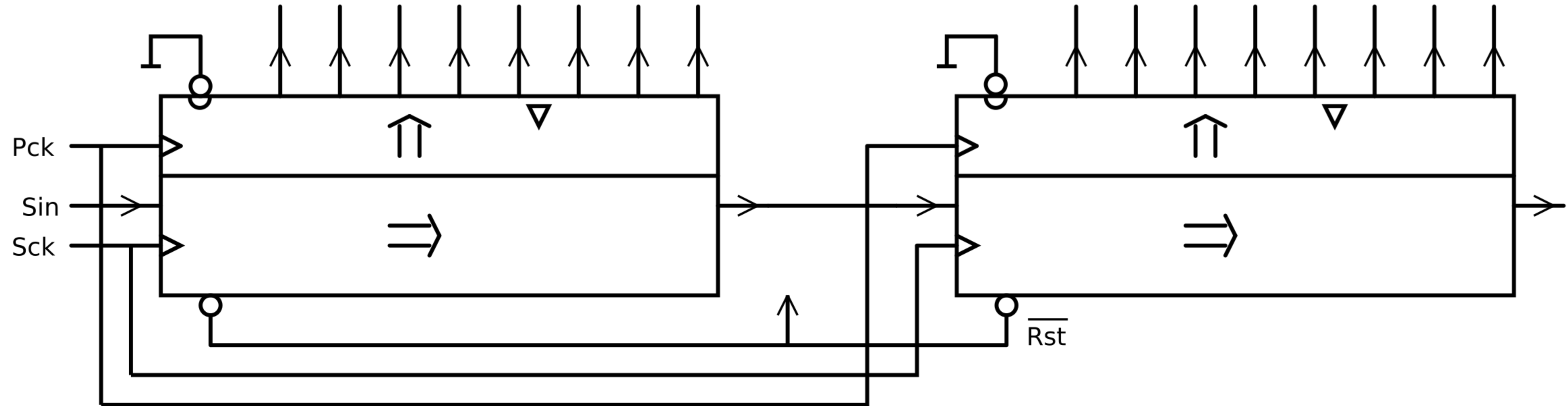
Registres série-parallèle



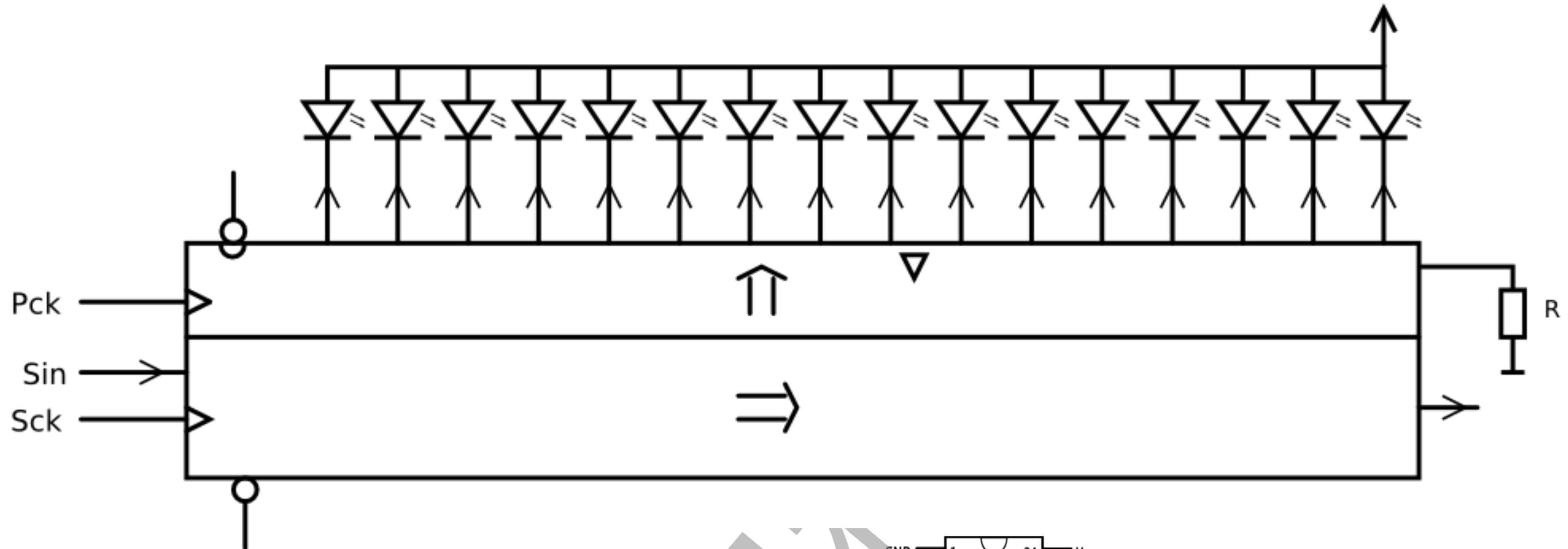
74HC595



Registres en cascade



Registres à sorties à courant constant

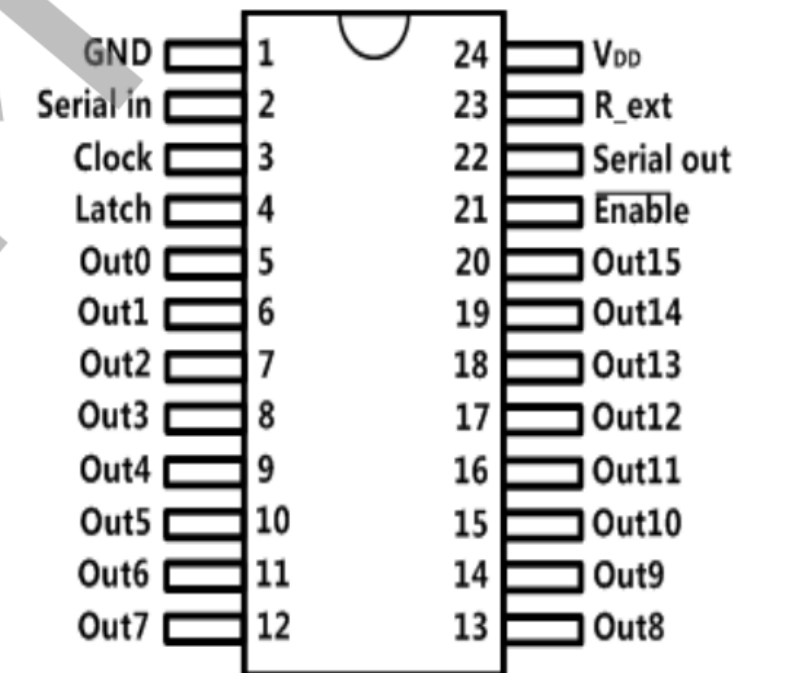


- TB62701, TLC5905, A6276...
- SUM2016 !

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

GND	1	24	VDD
Serial in	2	23	R_ext
Clock	3	22	Serial out
Latch	4	21	Enable
Out0	5	20	Out15
Out1	6	19	Out14
Out2	7	18	Out13
Out3	8	17	Out12
Out4	9	16	Out11
Out5	10	15	Out10
Out6	11	14	Out9
Out7	12	13	Out8

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LCD 背光源



```
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             SortieSerieOn;
15         } else {
16             SortieSerieOff;
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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