|  |  |  |
| --- | --- | --- |
|  | **Bac Technique Supérieur "Systèmes Numériques"** | |
|  |  |
|  |  |
|  | **LITZLER Samuel** |

***TP***

**Additionneur 4 bits**

**le 14 décembre 2018**

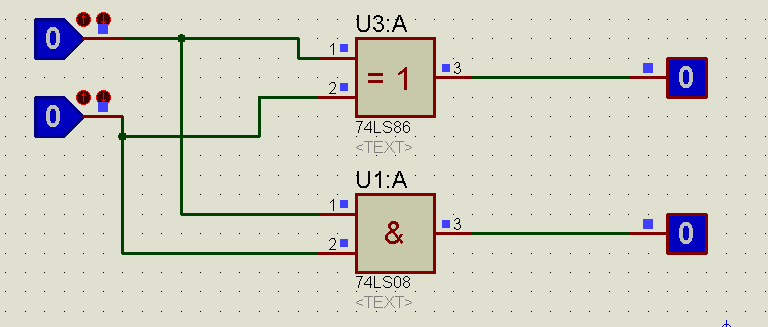
**Année : 2018 - 2019**

1. **Étude d’un demi additionneur**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a | b |  | S | r |
| 0 | 0 |  | 0 | 0 |
| 0 | 1 |  | 1 | 0 |
| 1 | 0 |  | 1 | 0 |
| 1 | 1 |  | 0 | 1 |

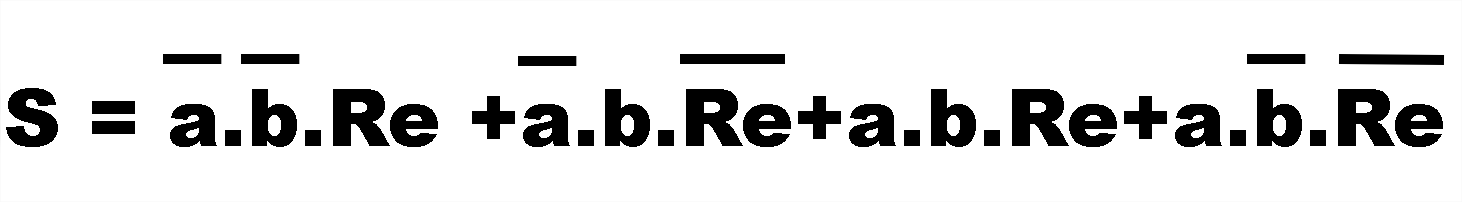
S = a + b (ou exclusif)

r = a.b

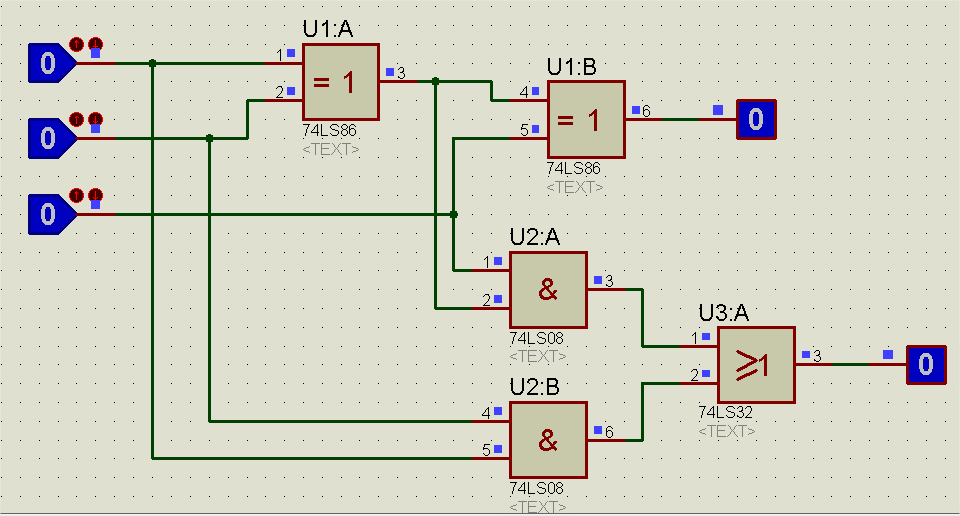


1. **Étude d’un additionneur**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a | b | re |  | S | Rs |
| 0 | 0 | 0 |  | 0 | 0 |
| 0 | 0 | 1 |  | 1 | 0 |
| 0 | 1 | 0 |  | 1 | 0 |
| 0 | 1 | 1 |  | 0 | 1 |
| 1 | 0 | 0 |  | 1 | 0 |
| 1 | 0 | 1 |  | 0 | 1 |
| 1 | 1 | 0 |  | 0 | 1 |
| 1 | 1 | 1 |  | 1 | 1 |



Rs = b.Re+a.b+a.Re



1. **Additionneur 4 bits**

