#  1. Organisation fonctionnelle de la chaîne d'information :

***Question 1 :***

VN

Ve

 **Chaîne d’information**

N

Information

visuelle

Température

θ°

***Question 2 :***

 **Thermocouple :**

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 **Conditionneur :**  \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 ***CAN :***

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

# C:\Users\MALLARD\AppData\Local\Temp\Structurel_1.png2. Organisation structurelle de la chaîne d'information :

# 3. Analyse de la fonction ACQUERIR :

#  3-1 . Analyses préliminaires:

 **3-1-1 . Thermocouple :**

 **θ =** \_ \_ \_ \_ \_ \_ **°C Ve =** \_ \_ \_ \_ \_ \_ **V**

 **Sensibilité =** \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_mV/°C

 **3-1-2 . CAN :**

 **N(10) = VN x 2n - 1** *Résolution : 8bits*

 **5**

 θ = 20 °C donc N = \_ \_ \_ \_

 VN = \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

|  |
| --- |
|  **N(10) =** |
| **B7** | **B6** | **B5** | **B4** | **B3** | **B2** | **B1** | **B0** |
|  |  |  |  |  |  |  |  |

 **3-1-3 . Conditionneur :**

 **A = VN =** \_ \_ \_ \_ \_ \_ \_ \_ \_

 **Ve**

#  3-2 . Analyse générale:

 **3-2-1 . Température maximale :**

 **Nmax =** \_ \_ \_ \_ \_ \_ \_ \_ \_ **Tmax =** \_ \_ \_ \_ \_ \_ \_ \_ \_

 Température maximale que l'on peut traiter avec ce dispositif : \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

 **3-2-2 . Validation du fonctionnement :**

 **T =** \_ \_ \_ \_ \_ \_ \_ \_ \_ **T =** \_ \_ \_ \_ \_ \_ \_ \_ \_

 **Ve =** \_ \_ \_ \_ \_ \_ \_ \_ \_ **Ve =** \_ \_ \_ \_ \_ \_ \_ \_ \_

 **VN =** \_ \_ \_ \_ \_ \_ \_ \_ \_ **VN =** \_ \_ \_ \_ \_ \_ \_ \_ \_

 **N =** \_ \_ \_ \_ \_ \_ \_ \_ \_ **N =** \_ \_ \_ \_ \_ \_ \_ \_ \_

# 4. Analyse des fonctions TRAITER & COMMUNIQUER :

#  4-1 . Calcul de la température:

**Température =** \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

#  4-2 . Programme de fonctionnement :

#  4-3 . Validation du traitement de l'information :

Temp Four min = \_ \_ \_ \_ \_ \_ \_ \_ \_ N= \_ \_ \_ \_ \_ \_ \_ \_ \_ Affichage = \_ \_ \_ \_ \_ \_ \_ \_ \_

Temp Four max = \_ \_ \_ \_ \_ \_ \_ \_ \_ N= \_ \_ \_ \_ \_ \_ \_ \_ \_ Affichage = \_ \_ \_ \_ \_ \_ \_ \_ \_

 Conclusion : \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

#  4-4 . Température de consigne :

