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

***Question 1 :***

VN

Ve

**Chaîne d’information**

N

Information

visuelle

Température

θ°

***Question 2 :***

**Thermocouple :**

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

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

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***CAN :***

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# 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 = \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

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| **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 : \_ \_ \_ \_ \_ \_ \_ \_

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**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 :

