| **Data** | **Color** | **Description** |
| --- | --- | --- |
| Ch Frame Color | 000: White | Closed channel’s frame color is represented with “White” color. |
| 001: Green | Open channel’s frame color is represented with “Green” color. |
| 010: Yellow | When an error is occurred in output channel, output channel’s frame color is represented with “Yellow” color. |
| 011: Gray | Lockout channel’s frame color is represented with “Gray” color. |
| Ch Voltage Digit Color | 000: White | Closed channel’s voltage digit color is represented with “White” color. |
| 001: Green | Open channel’s voltage digit color is represented with “Green” color. |
| 011: Gray | Lockout channel’s voltage digit color is represented with “Gray” color. |
| 100: Magenta | Invalid data of voltage value is represented with “Magenta” color. |
| Ch Current Digit Color | 000: White | Closed channel’s current digit color is represented with “White” color. |
| 001: Green | Open channel’s current digit color is represented with “Green” color. |
| 011: Gray | Lockout channel’s current digit color is represented with “Gray” color. |
| 100: Magenta | Invalid data of current value is represented with “Magenta” color. |
| Ch Outflow Tube | 000: White | Closed channel’s outflow tube color is represented with “White” color. |
| 001: Green | Open channel’s outflow tube color is represented with “Green” color. |
| 011: Gray | Lockout channel’s outflow tube color is represented with “Gray” color. |

Size yollanacak 2 Bytelik mesajı aşağıdaki ICD (Interface Control Document) parçasında belirtildiği şekilde parslayıp kullanıcıya sunun.

| **Byte** | **Bit** | **Data** | **Length (in bit)** | **Data Type** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| 0 | 7 - 5 | Ch1 Frame Color | 3 | Information | 000 : Beyaz |
| 001 : Yeşil |
| 010 : Sarı |
| 011: Gri |
| 0 | 4 - 2 | Ch1 Voltage Digit Color | 3 | Information | 000 : Beyaz |
| 001 : Yeşil |
| 011: Gri |
| 100 : Magenta |
| 0 | 1- 0 | Reserved | 2 | Reserved | Reserved |
| 1 | 7 - 5 | Ch1 Current Digit Color | 1 | Information | 000 : Beyaz |
| 001 : Yeşil |
| 011: Gri |
| 100 : Magenta |
| 1 | 4 - 2 | Ch1 Outflow Tube | 3 | Information | 000 : Beyaz |
| 001 : Yeşil |
| 011 : Gri |
| 1 | 1 - 0 | Reserved | 1 | Reserved | Reserved |

This ICD (Interface Control Document) was created in order to show colors of 4 components to the user by parsing the data. These components are listed Ch1 Frame Color, Ch1 Voltage Digit Color, Ch1 Current Digit Color, and Ch1 Outflow Tube.

IMPLEMENTATION

* A 2 bytes of input string is entered
* “String to Byte Array” function is applied to this string
* String is converted to 2 bytes of input string.
* “Index Array” function converts these bytes into bits to be reached easily (to access a specific element in that array
* Bit “shifting”, and “masking” is applied in order to reach a specific group of bits in each byte.

There is roughly 1 input and 4 output respectively.

Input: 2 bytes string

Output: Ch1 Frame Color, Ch1 Voltage Digit Color, Ch1 Current Digit Color, and Ch1 Outflow Tube

**BTYE 0**

1. bits 🡪 Reserved
   1. bits 🡪 Ch1 Voltage Digit Color

* 000 : White
* 001 : Green
* 010 : Yellow
* 011: Gray

7-5 🡪 Ch1 Frame Color

* 000 : White
* 001: Green
* 010 : Yellow
* 011: Gray

**BTYE 1**

1-0 bits 🡪 Reserved

4-2 bits 🡪 Ch1 Outflow Tube

* 000 : White
* 001 : Green
* 011 : Gray

7-5 bits 🡪 Ch1 Current Digit Color

* 000 : Beyaz
* 001 : Yeşil
* 011 : Gri
* 100 : Magenta

diyagram, metin, plan, teknik çizim içeren bir resim

Açıklama otomatik olarak oluşturuldu

Figure 1 Block Diagram

SAMPLE

ekran görüntüsü, metin, grafik yazılımı, multimedya yazılımı içeren bir resim

Açıklama otomatik olarak oluşturuldu