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| Mini Project  Control station with a collaborative robot controlled by PLC |  |
| Team members   |  |  |  |  | | --- | --- | --- | --- | | Last name | First name | Last name | First name | |  |  |  |  | | Students |
| Prepared by:   |  |  |  | | --- | --- | --- | | Name | Signature | Date | |  |  |  | | **One team member** |
| Controlled by:   |  |  |  | | --- | --- | --- | | Name | Signature | Date | |  |  |  | | **Second team member** |
| Approved by:   |  |  |  | | --- | --- | --- | | Name | Signature | Date | |  |  |  | | **Supervisor** |
|  | Sion, April 08, 2022 |
| Installation Qualification |  |

# Robot

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| --- | --- |
| **IQ ID** | **Profinet active** |
| 1.1 | The display of the robot shows the Profinet connection as active.  yes |

# Station one.

|  |  |
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| **IQ ID** | **Laser sensor active** |
| 2.1 | The laser sensor O300DL is connected on port 1 of the IO-Link Master |
| 2.2 | A value of the sensor can be seen.  In TIA Portal, the PLC tags displays a value depending on the position of the part in front of the sensor |
| **IQ ID** | **Ultrasound sensor** |
| 2.3 | The laser sensor U300 D50 is connected on port number 3 |
| 2.4 | The sensor detects a hand in front of the sensor.  In TIA Portal, the PLC tags displays a Boolean with “TRUE” if the hand is placed in front of the sensor. |
| 2.5 | The release position of the sensor is correct.  If no obstacle is present in front of the sensor the signal bit is: FALSE  The quality bit is: FALSE |

# Next Function