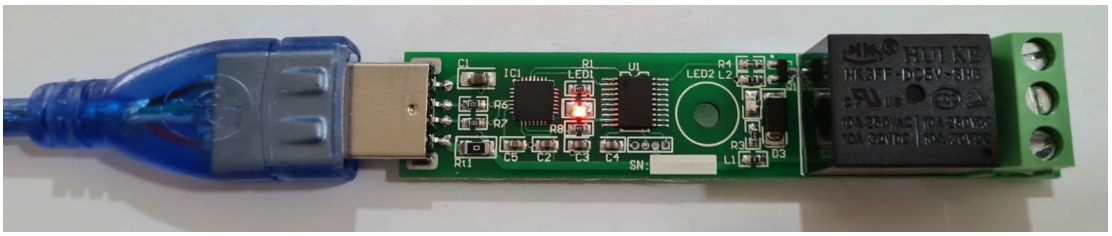
Dry Contact and driver installation with alarm testing procedure

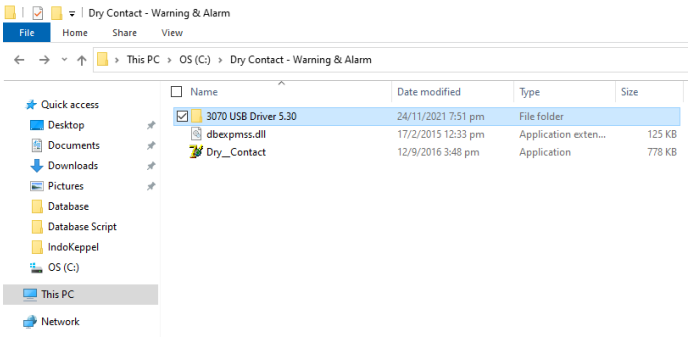
Step 1: Copy and paste dry contact folder in computer C drive

Step 2: Connect dry contact with either a USB cable or directly to a USB port on the computer

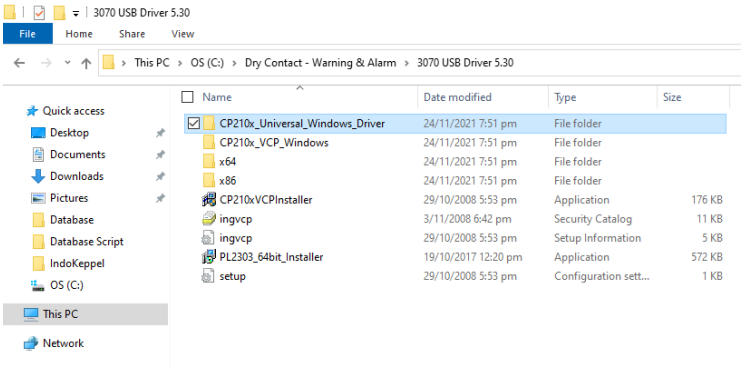


Dry contact in normal status with no warning or alarm with LED1 lights up in red

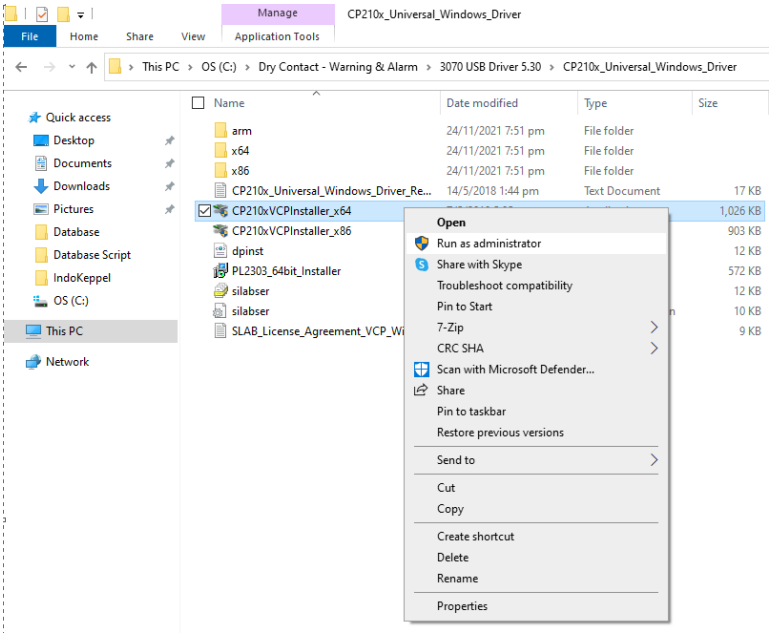
Step 3: Click into dry contact folder and click into 3070 USB Driver 5.30



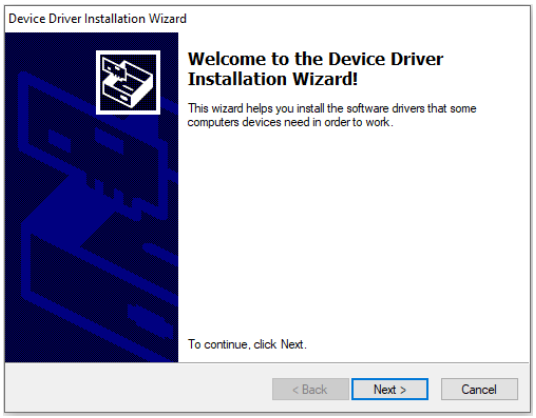
Step 4: Click into CP210x_Universal_Windows_Driver

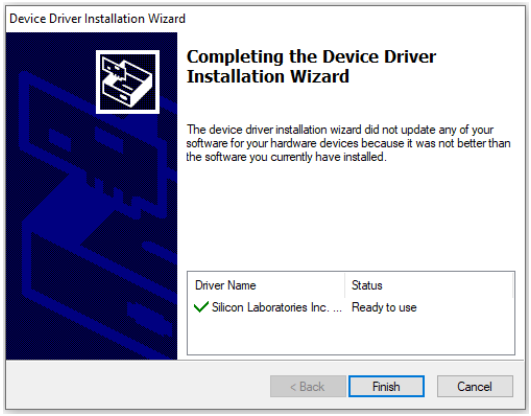


Step 5: Right click on CP210xVCPInstaller_x64 and click Run as administrator

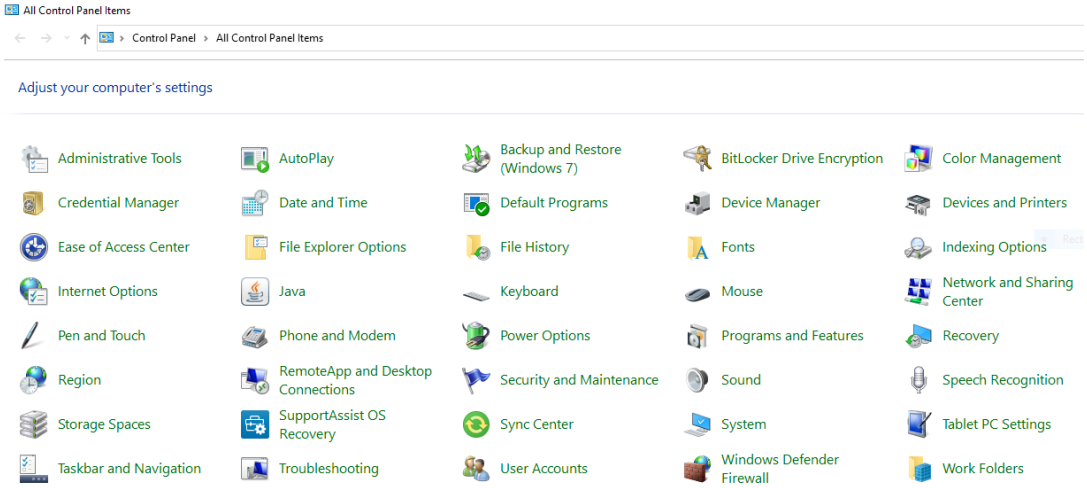


Step 6: Click Next and Finish once installation completed

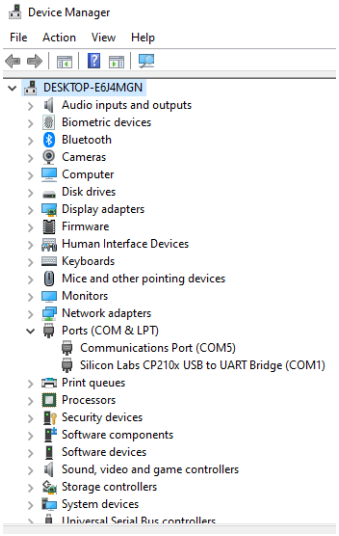




Step 7: Go into Control Panel and click on Device Manager

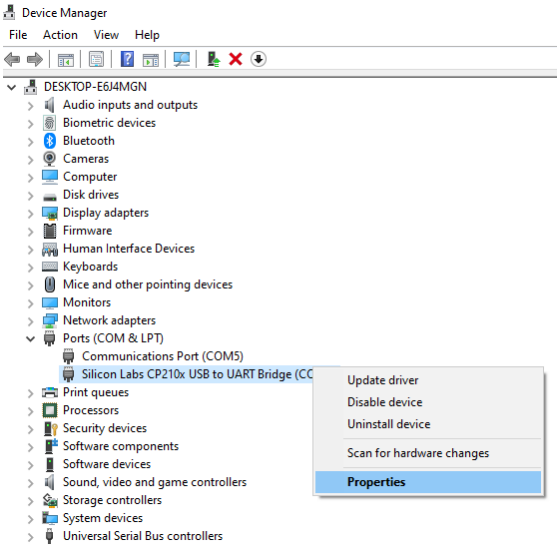


Step 8: Click to expand Ports (COM & LPT) folder and ensure Silicon Labs CP210x USB to UART Bridge is running in COM 1

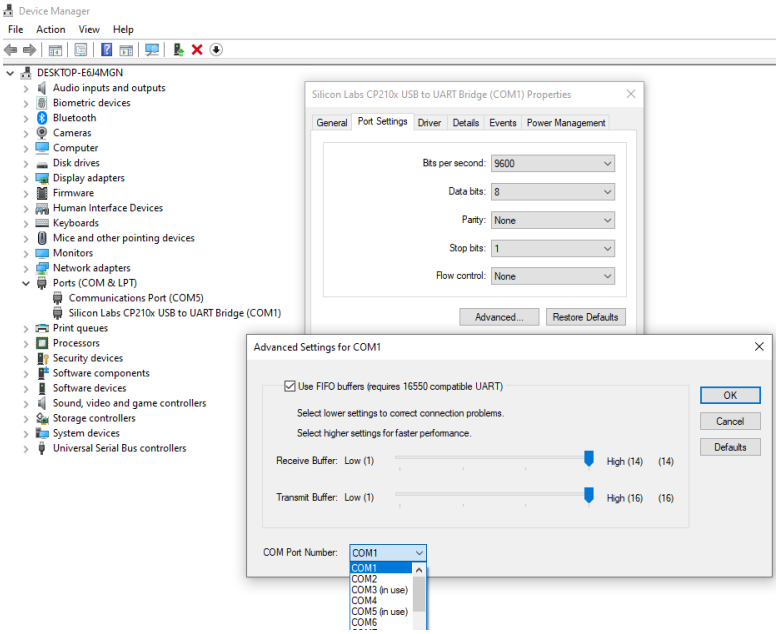


If it is not running in COM1, follow the below steps to configure it to be COM1.

Step 9: Right click Silicon Labs CP210x USB to UART Bridge and click Properties

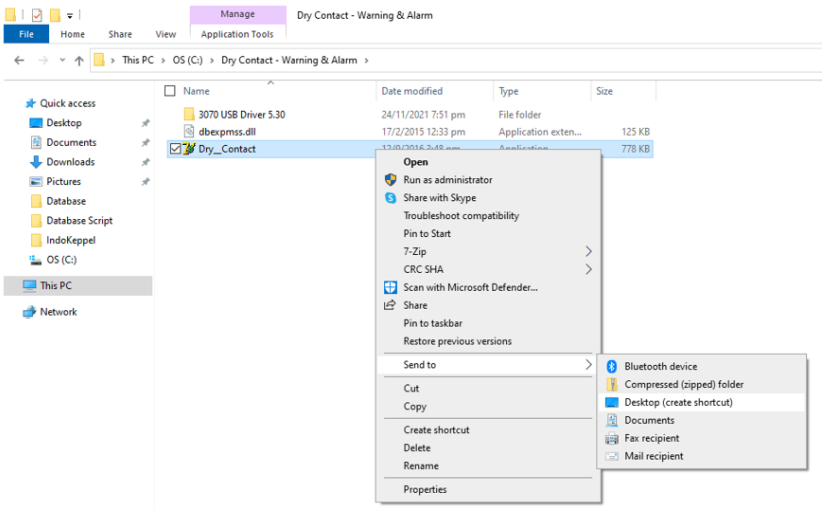


Step 10: Click on Port Settings, Advanced and change COM Port Number to COM1 and click OK

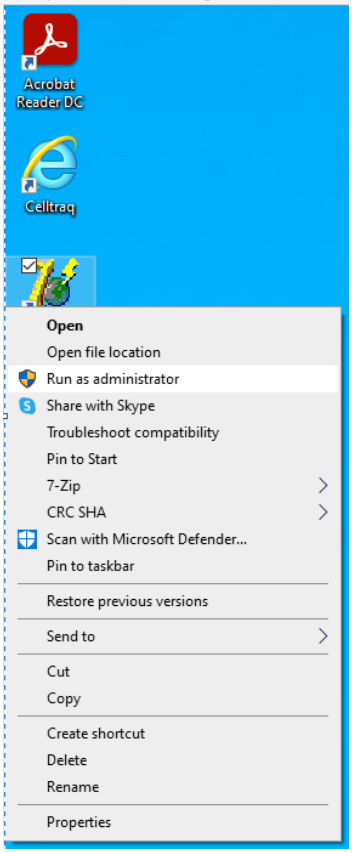


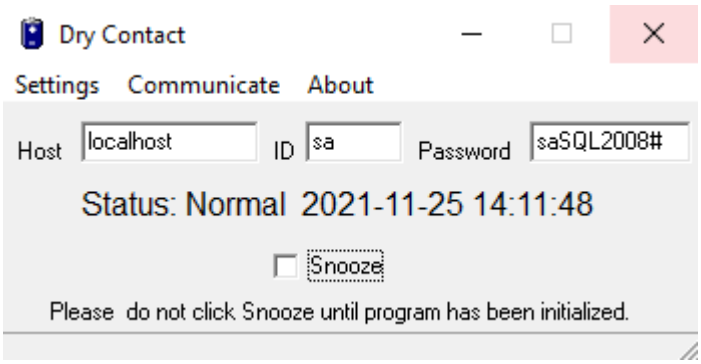
If there is other device that is occupying COM1, reassign it the same way as above to another COM number. There can never be two devices using the same COM port.

Step 11: Go to Dry Contact folder and right click on Dry_Contact program to send to Desktop (create shortcut)



Step 12: On desktop, right click on the Dry Contact program and Run as administrator



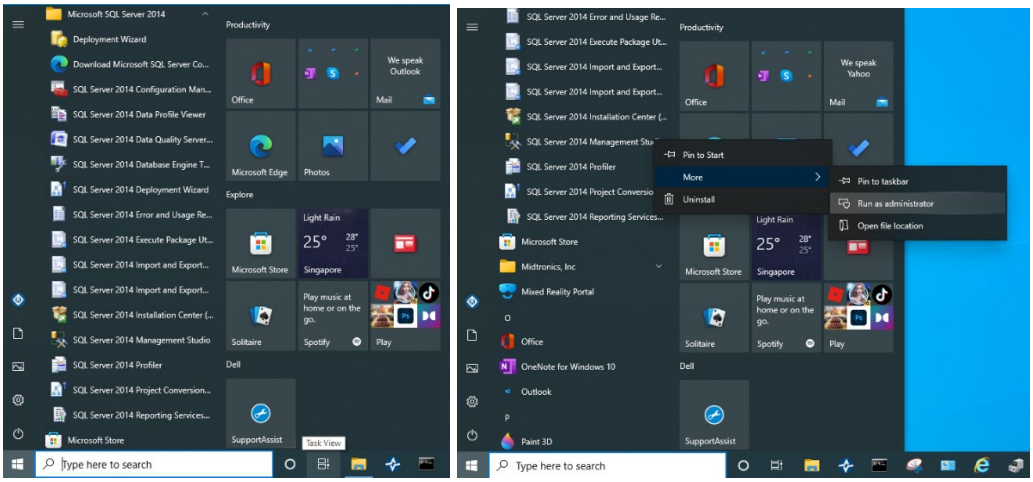


Wait for Dry Contact program to load and wait till you see the status with timestamped information.

##Snooze is for user that already acknowledged there is a battery alarm but doesn't want to see any alarm status being send out.

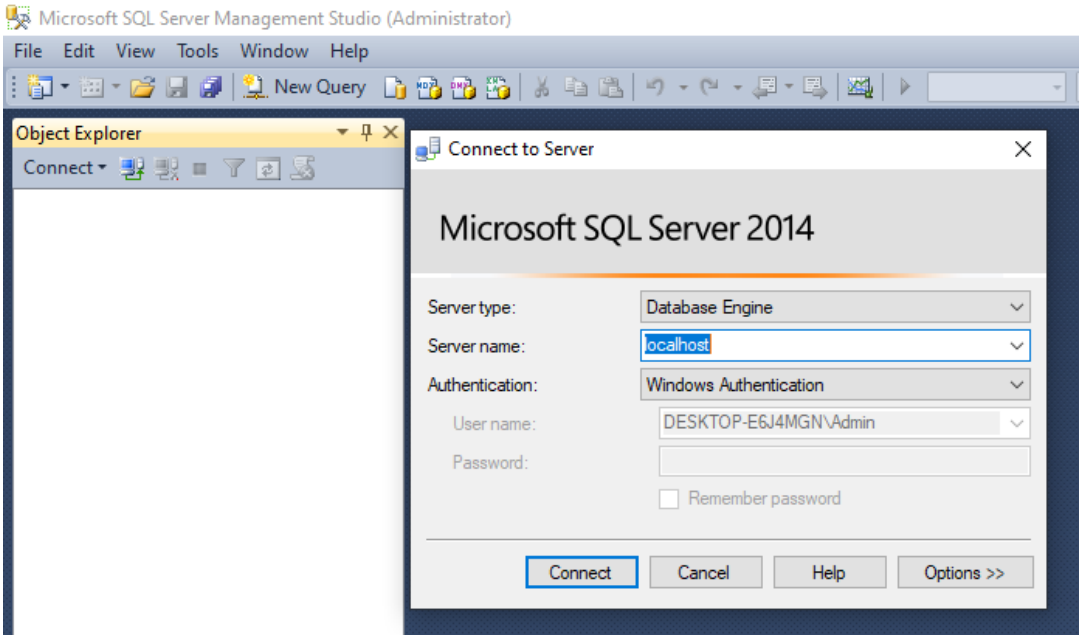
Step 13: **Alarm simulation**

Click on Start and click on Microsoft SQL Server 2014 folder, look for SQL Server 2014 Management Studio. Right click, click More and click Run as administrator



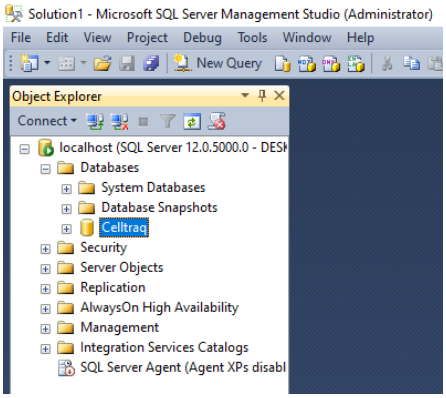
Step 14: Click Connect to log in.

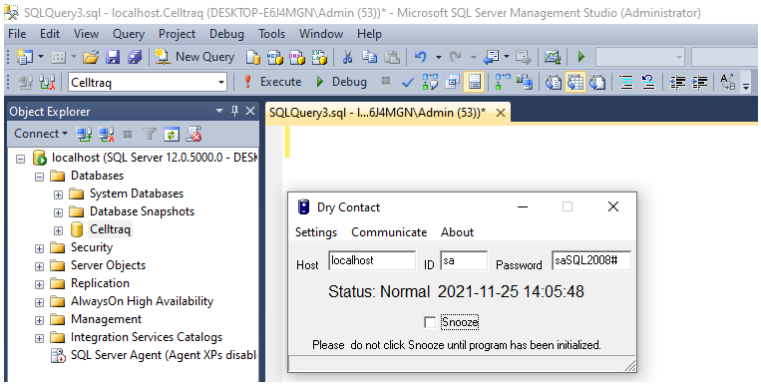
(You can ignore the Server name, every computer is different)



Step 15: Click on Databases to expand it, click on Celltraq and New Query tab

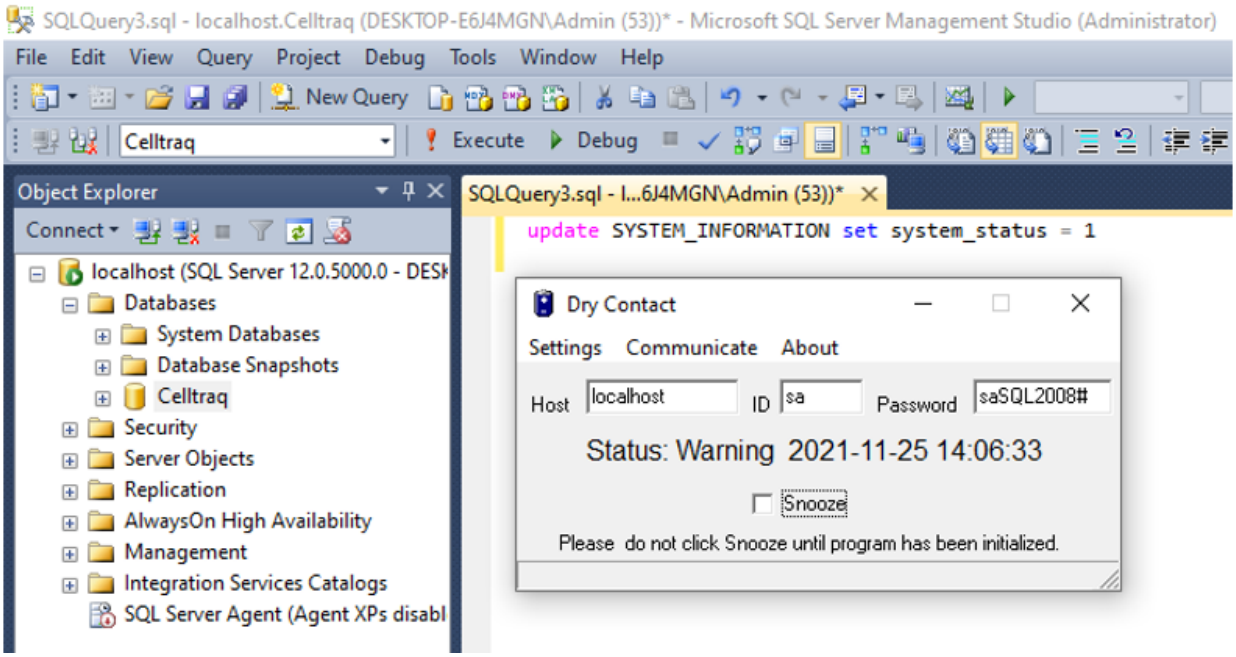
Ensure Dry Contact status is Normal

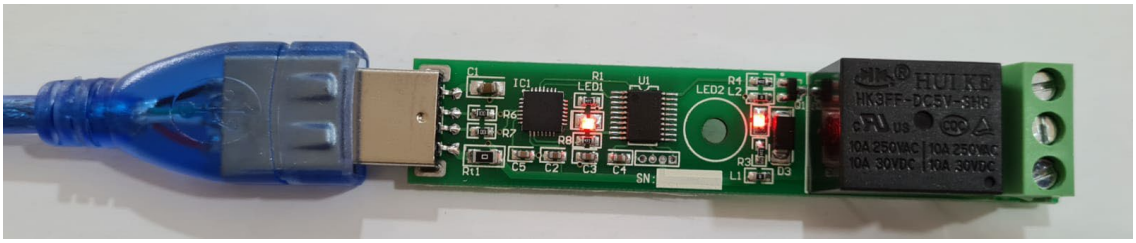




Enter update SYSTEM_INFORMATION set system_status = 1 and click on ! Execute

Wait for few seconds, this command will trigger a warning on the dry contact

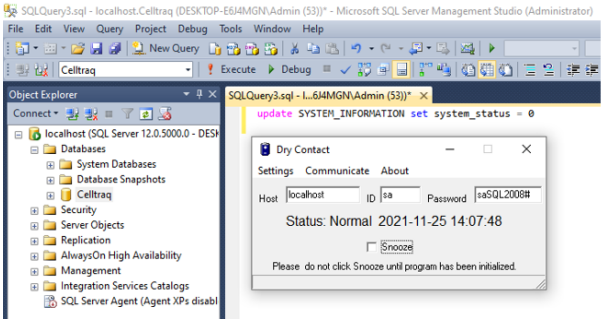


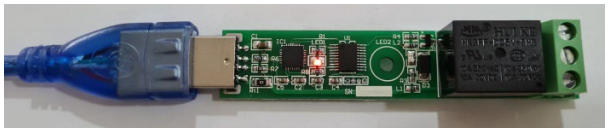


LED1 and LED2 will lights up at the same time and you can hear a relay clicking on the dry contact.

Step 16: Enter update SYSTEM_INFORMATION set system_status = 0 and click on ! Execute

Wait for few seconds, this command will normalize the warning on the dry contact



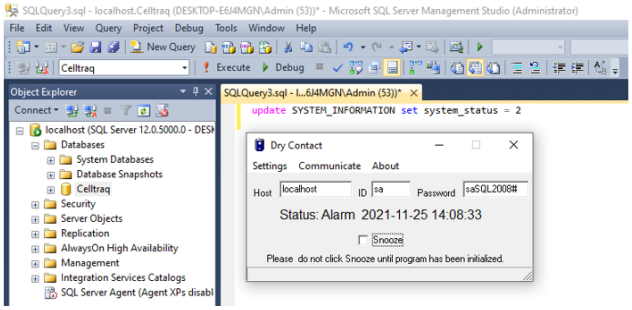


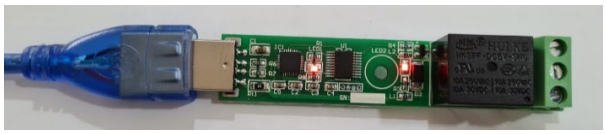
Dry contact in normal status with no warning or alarm with only LED1 lights up in red

Step 17: Enter update SYSTEM_INFORMATION set system_status = 2 and click on ! Execute

Wait for few seconds, this command will trigger a alarm on the dry contact

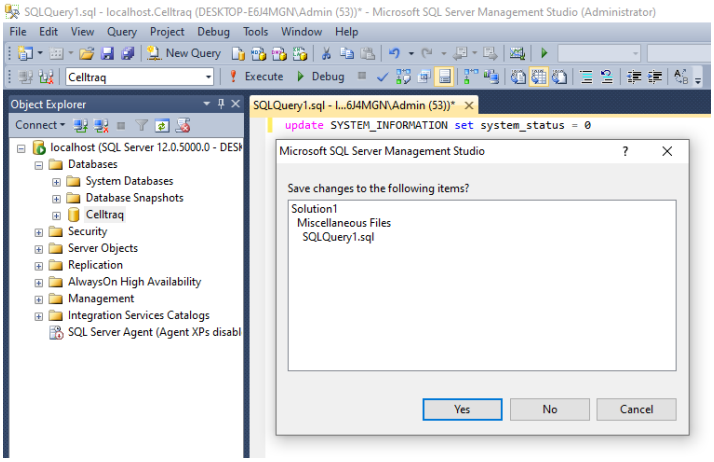
LED1 and LED2 will lights up at the same time and you can hear a relay clicking on the dry contact.





Step 18: Repeat step 16 to normalize the alarm

Step 19: Click X on Microsoft SQL Server Management Studio and Click No to close the program

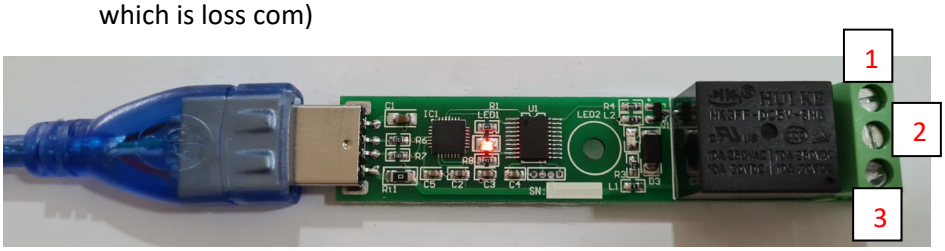


Step 20: **Dry contact wiring termination**

Disconnect dry contact first before any wiring termination.

There are two modes we can use;

1) NO – Normally Open, dry contact will close and send a signal to trigger a alarm when there is a battery warning or alarm
2) NC- Normally Close, dry contact will open and send a signal to trigger a alarm where is a battery warning or alarm
   (If there is no power keeping the dry contact closed, we can also interpret it as a offline situation which is loss com)



1 is Normally Close

2 is Common

3 is Normally Open

For Normally Closed application, you must connect two wires to 1 and 2.

For Normally Open application, you must connect two wires to 3 and 2.

Connect back the dry contact and launch the dry contact program on desktop, repeat step 13 to 19 for the integrated alarm testing.

There will be no alarm signal being sent out if the dry contact program is accidentally being shut down even with power to the dry contact.

The dry contact program must always be running for 24/7 status monitoring