How to configure a large amount of the same modules with same configurations in INIT* to GND state?

Note: only *I-7K/M-7K/I-87K/tM series support this function.*

If there is an application need to configure 250 pieces of tAD4P2C2 as below configurations.

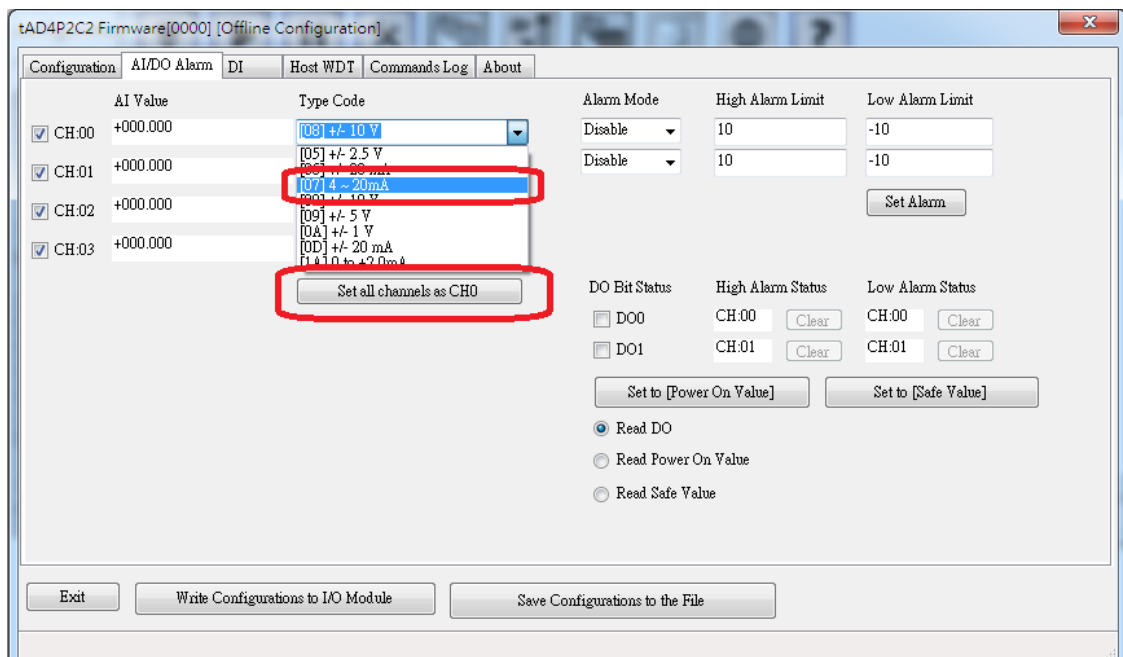| 4 Channel AI	4 ~20 mA
Net Address	1 ~ 250
Baud Rate	19200
Protocol	Modbus RTU

DCON Utility Pro provides a very quick and easy way to finish this job.

Step 1: Select the "Remote I/O INIT* Quick Configuration" ➜ "Configure as INIT* Status" ➜ Select tM option ➜ then tAD4P2C2 module ID.
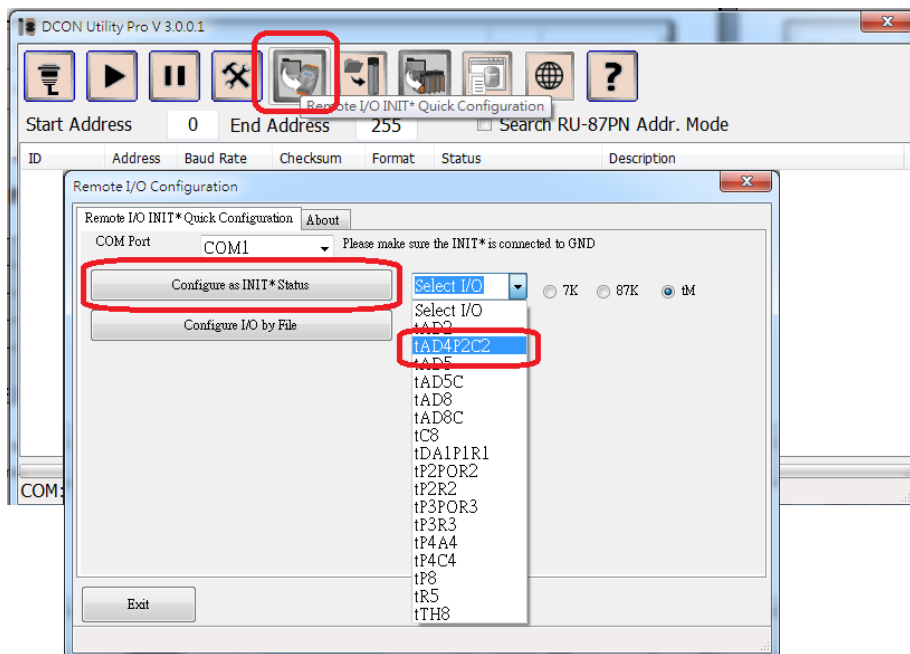
Step 2: Select the AD 4~20mA type code for channel 0 then "Set all channels as CH0"

Step 3: Set the Protocol as Modbus RTU, Address 1, Baud Rate 19200

Then "Write Configurations to I/O Module", if module is correctly connected in INIT* to GND state, it can get successful message and finish the first one module.
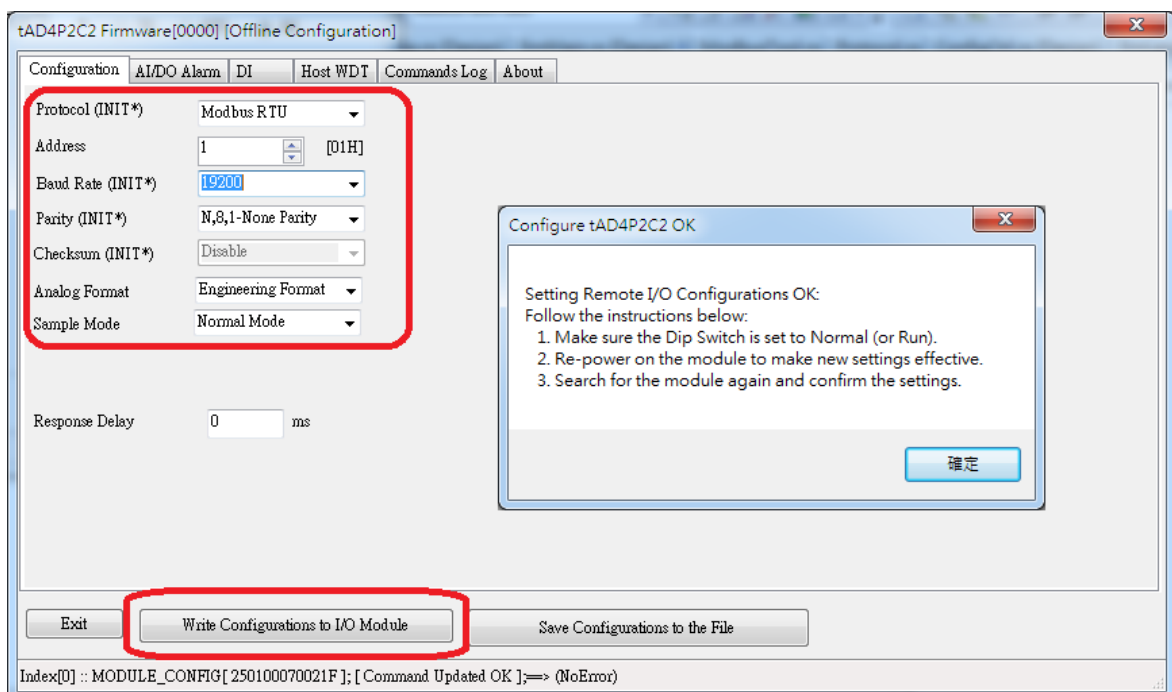
Note 1: Make sure to **power on module in INIT* to GND** state the USB driver is correctly installed if use USB to RS-485 converter.

Note 2: When change the I/O configurations, it operates in offline state, it does not send commands to module till click the "Write Configurations to I/O Module".

Step 4: Turn off the power and remove the previous configured tAD4P2C2 and let the INIT* in normal state.

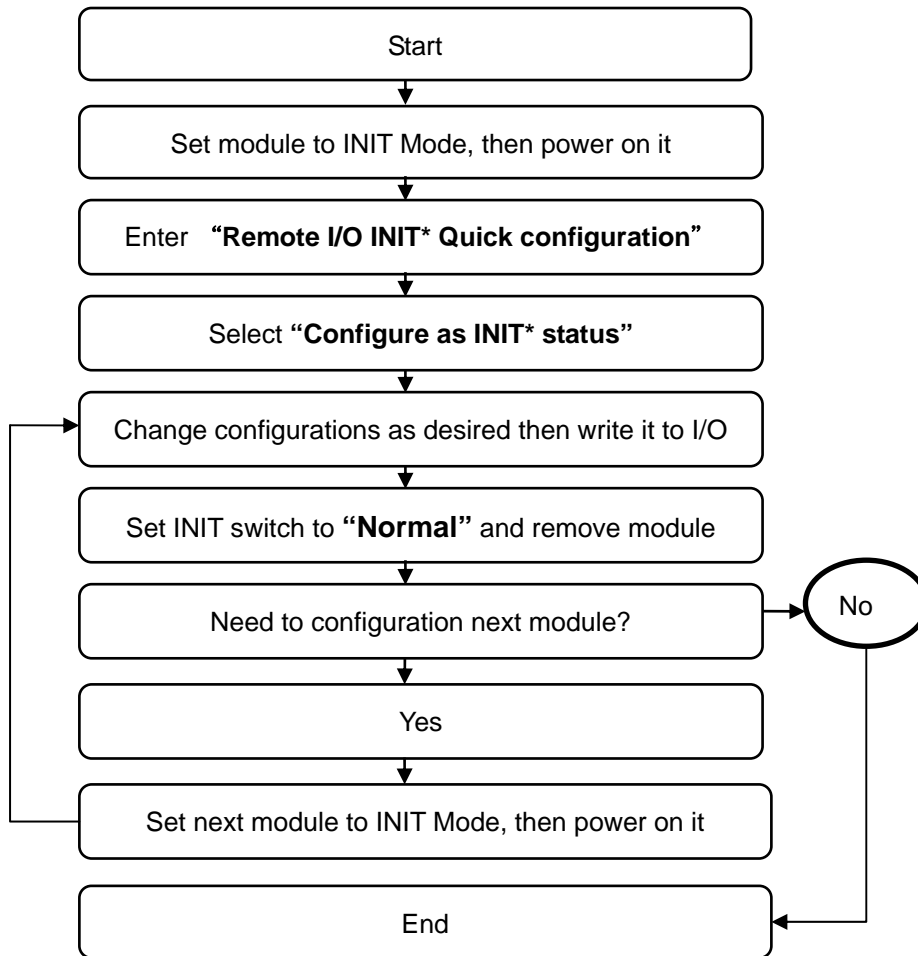Step 5: Connect the next tAD4P2C2 in INIT* to GND state and turn on the power.

Step 6: Change the Address and "Write Configurations to I/O Module".

Step 7: Repeat the Step 4 to Step 6.
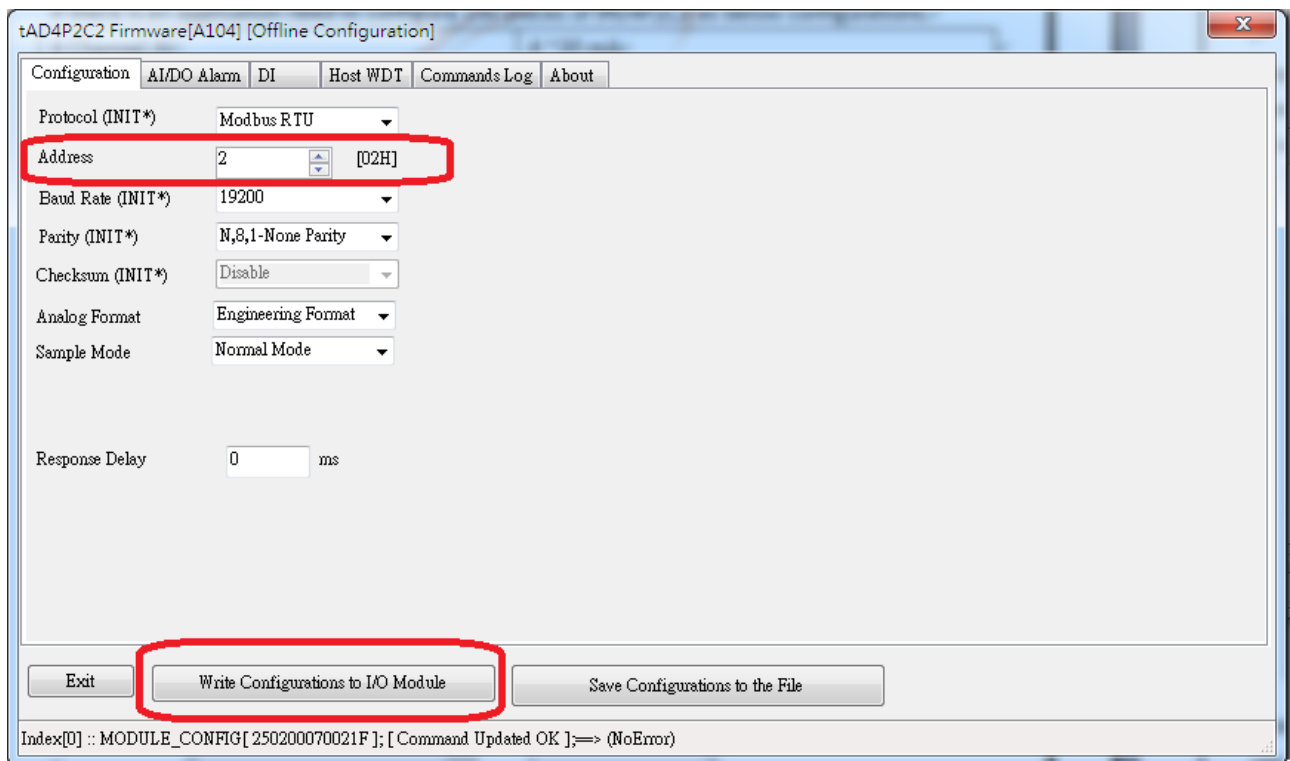
Procedure of "Remote I/O INIT* Quick Configuration"

```
                        ┌─────────────────────────────────┐
                        │              Start              │
                        └─────────────────────────────────┘
                                        │
                                        ▼
                        ┌─────────────────────────────────┐
                        │ Set module to INIT Mode, then power on it │
                        └─────────────────────────────────┘
                                        │
                                        ▼
                        ┌─────────────────────────────────┐
                        │ Enter "Remote I/O INIT* Quick configuration" │
                        └─────────────────────────────────┘
                                        │
                                        ▼
                        ┌─────────────────────────────────┐
                        │   Select "Configure as INIT* status"  │
                        └─────────────────────────────────┘
                                        │
                ┌──────────────────────▶▼
                │       ┌─────────────────────────────────┐
                │       │ Change configurations as desired then write it to I/O │
                │       └─────────────────────────────────┘
                │                       │
                │                       ▼
                │       ┌─────────────────────────────────┐
                │       │ Set INIT switch to "Normal" and remove module │
                │       └─────────────────────────────────┘
                │                       │
                │                       ▼
                │       ┌─────────────────────────────────┐        ╭─────╮
                │       │ Need to configuration next module? │──────▶│  No │
                │       └─────────────────────────────────┘        ╰─────╯
                │                       │                              │
                │                       ▼                              │
                │       ┌─────────────────────────────────┐           │
                │       │               Yes               │           │
                │       └─────────────────────────────────┘           │
                │                       │                              │
                │                       ▼                              │
                │       ┌─────────────────────────────────┐           │
                └───────│ Set next module to INIT Mode, then power on it │        │
                        └─────────────────────────────────┘           │
                                                                       │
                        ┌─────────────────────────────────┐           │
                        │              End                │◀──────────┘
                        └─────────────────────────────────┘
```

Step 8: After finish all modules, we can create the folder for each application and save the configurations to file.
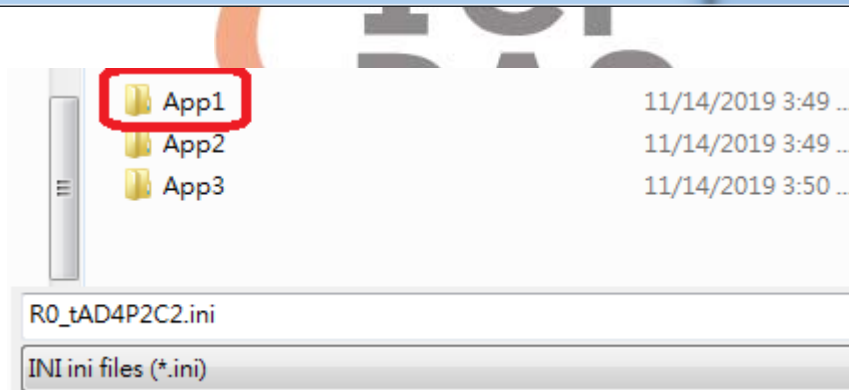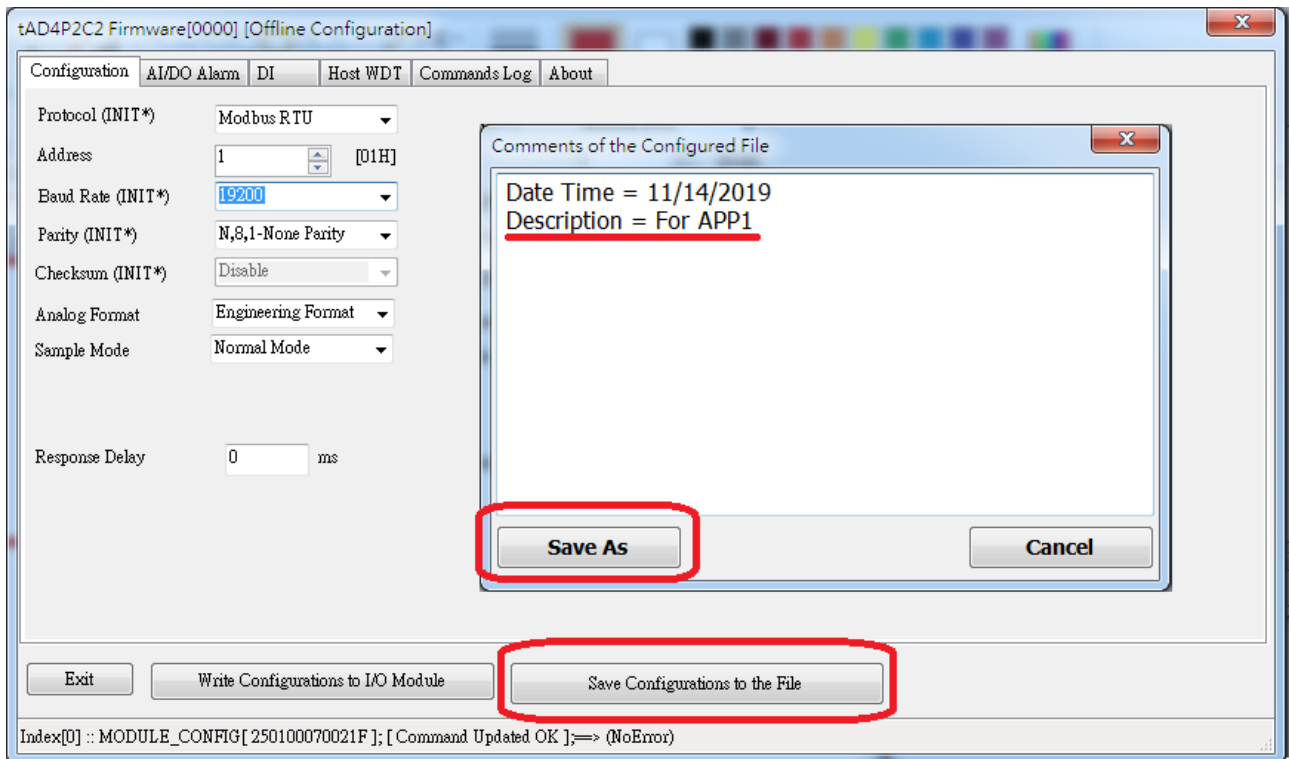
Note 1: don't change the file name.

Note 2: this is an offline operation, to save the configuration file does not need to connect to module.

Step 9: It can load the previous configured file to review the module's setting and write to module.