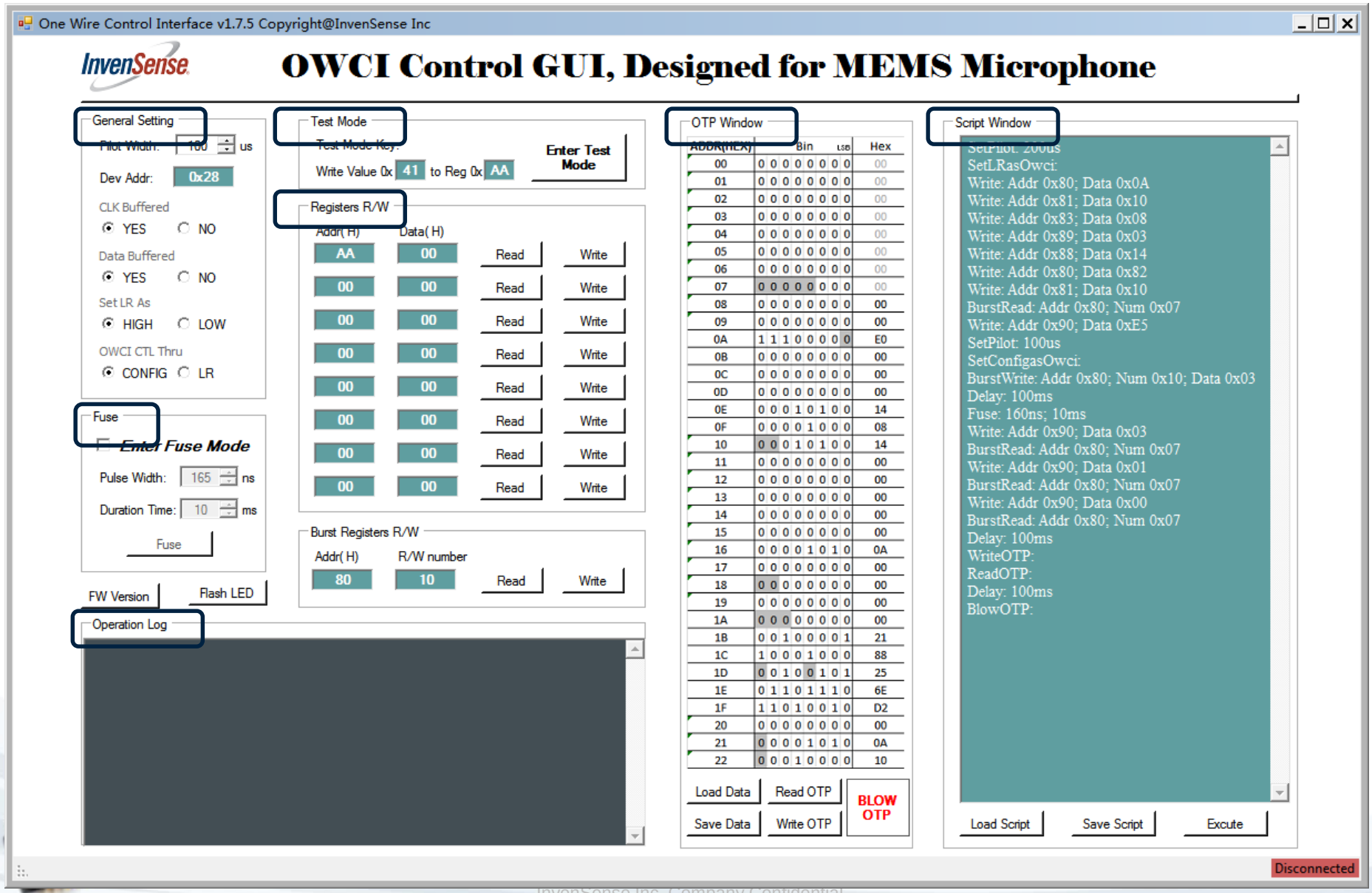
Overview of OWCI Software



Function Blocks of OWCI Software

- **General Setting**
  - Hardware control, include pilot width and device address.
- **Test Mode**
  - Enter Test Mode, supporting different DUTs.
- **Registers Read/Write**
  - Single or burst registers read or write.
- **Fuse**
  - Support eFuse.

These operations are almost the same as last version software.

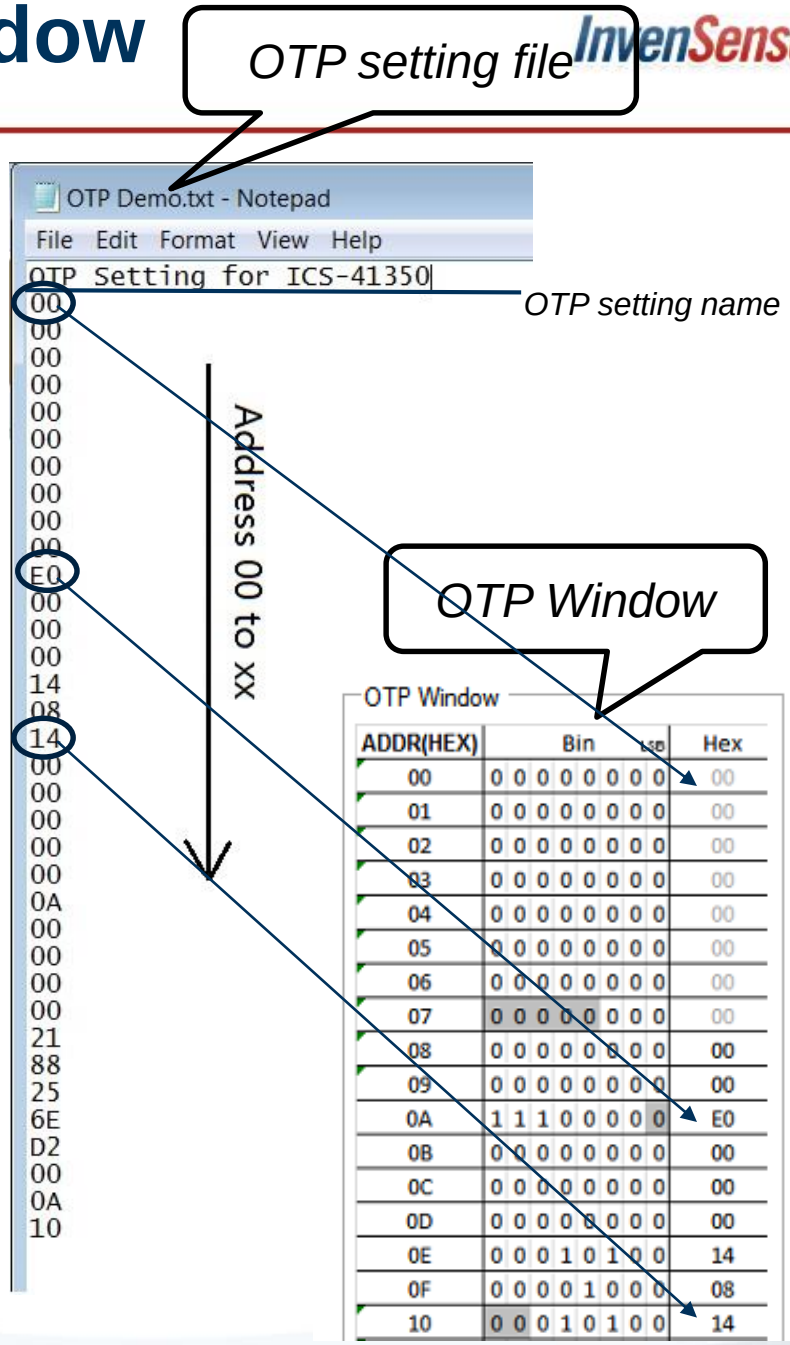
- **OTP Window**
  - OTP operation, bit by bit or byte by byte, load data from a .txt file and save data to a .txt file.
- **Script Window**
  - Load script from a .txt file and execute, edit a script and execute or save to .txt file.
- **Operation log**
  - Display all the operations include commands and return data

New Features

- **OTP window**
  - Advantages:
    - 1. Totally new designed tools for eMemery operation in md008, could be re-used in future project as well;
    - 2. For each project, software will initialize OTP window based on a default config file, no need to rebuild a new GUI.
- **Script window**
  - Advantages:
    - 1. Script operation is a simple, flexible and efficient way for both PE and designers to do validation;
    - 2. For each project, no need to rebuild a new GUI, just write new script and execute;
    - 3. Script file is easy save and re-used between different sites.

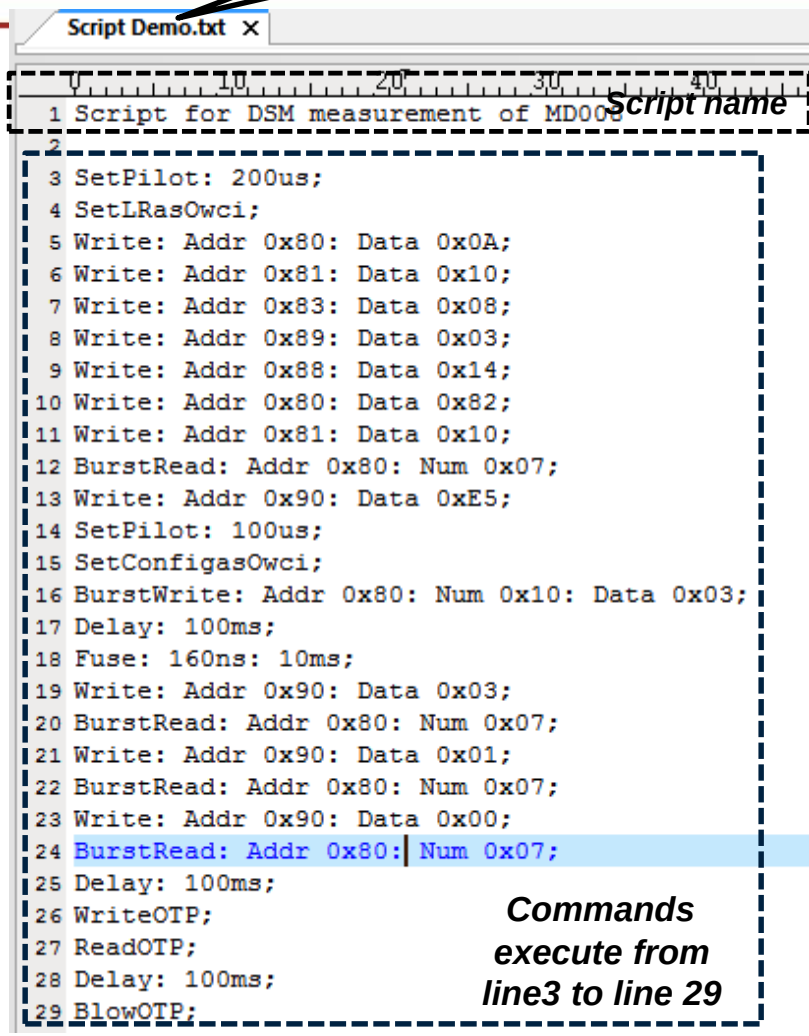
Blocks Review – OTP window

- Functions of OTP Window
  - Edit the window directly, supporting edit bit by bit or byte by byte, and write OTP or blow OTP;
  - Save window data to a .txt file as right format;
  - Load data form a .txt file as right format, and write OTP or blow OTP;
  - After load, also can edit the updated window, and then save to a file, write OTP or blow OTP;
  - Command line supporting, ext.
    writeotp.exe OTP Demo.txt
    blowotp.exe OTP Demo.txt
    (Note: xxxxotp.exe and OTP Demo.txt must be in same directory).



Blocks Review – Script window

- Functions of Script Window
  - Edit a new script, and execute;
  - Edit a new script, and save to a .txt file as right format;
  - Load script form a .txt file as right format, and execute;
  - After load script, also can edit in the updated window, and then choose to save to a new file or execute.
  - Command line supporting, ext. *execute.exe Script Demo.txt (Note: xxxxotp.exe and OTP Demo.txt must be in same directory).*



!!! Each command in single line

Description of Commands

- Write: Addr 0x80; Data 0x10 *//write value 0x10 to register 0x80*
- Read: Addr 0x80 *//Read value of register 0x80*
- BurstWrite: Addr 0x80; Num 0x10; Data 0x03 *//Burst write 0x03 to register 0x80-0x8A*
- BurstRead: Addr 0x80; Num 0x10 *//Burst Read values of register 0x80-0x8A*
- SetPilot: 200us *//Set pilot as 200us*
- Delay: 100ms *//Delay 100ms*
- Fuse: 160ns; 10ms *//Set fuse pulse as 160ns, fuse clock duration as 10ms, and fuse*
- WriteOTP: *//Write OTP data to relative registers*
- ReadOTP: *//Read OTP data*
- BlowOTP: *//Blow OTP, take care of POWER*
- SetLrAsOwci: *//Set LR pin on PCB as OWCI pin*
- SetConfigAsOwci: *// Set CONFIG pin on PCB as OWCI pin*