



Portwell Engineering Toolkit API Sample Code Quick Build Manual v0.1

- Introduction

This Manual provide the system requirement and sample code build step of Portwell Engineering Toolkit (PET) API. User can find more detail in Portwell Engineering Toolkit Document.

PET supported OS: Windows 7, Windows 10, Ubuntu 18.04 and later, CentOS 7 and later.

PET API sample code test application path:

Windows PET_API sample code: PET_API\Windows\sample\TESTAP.cpp

Linux PET_Utility: PET_API\Linux\x64\release\TESTAP.c

- PET_API supported function:

System Info: Board Name, Bios verison, EC verison, PET API version.

Hardware Monitor: Temperature, Voltage, and Fan speed.

GPIO: Read and set GPIO pin status (if board has this function).

SMBus: PCH SMBus control (if board has this function).

Watch Dog: Set, trigger, and stop watch dog timer on EC/Super IO.

- Build and Run PET_API TestAP on Windows

Tool Requirement: **Visual Studio 2015 Express or later.**

Build Step:

1. Unzip 20220422_Unified_PET_4.4.38.zip
2. Go to "20220422_Unified_PET_4.4.38\PET_API\Windows\sample" folder
3. Use Visual Studio to open TESTAP.sln.
4. Built application is 20220422_Unified_PET_4.4.38 \PET_API\Windows\release\x64\samplex64.exe.



Execution Step:

1. Run Command Prompt as Administrator.”
2. cd to “20220422_Unified_PET_4.4.38 \PET_API\Windows\release\x64” folder
3. run samplex64.exe as Fig-1 shows.

```
選擇 系統管理員: 命令提示字元 - samplex64.exe
Microsoft Windows [版本 10.0.19045.2604]
(c) Microsoft Corporation. 著作權所有，並保留一切權利。
C:\WINDOWS\system32>d:
D:\>cd Unified_PET\PET_API\Windows\release\x64
D:\Unified_PET\PET_API\Windows\release\x64>samplex64.exe
==== Portwell Inc ====
Test Menu:
1)BOARD_INFO
2)HWM_TEST
3)CPU_Info
4)EC_IIC_Word
5)EC_IIC_Byte_Write
6)EC_IIC_Byte_Read
7)EC_IIC_Quick
19)EC_IIC_Block
8)WDT_TEST
23)WDT_DISABLE
9)GPIO_READ
10)GPIO_WRITE
22)GPIO_SETDIR
11)TEST_GPIO_INPUT
12)TEST_GPIO_INPUT2
13)SMBUS_TEST
21)SMBUS_SCAN
20)SMBUS_EEPROM_TEST
14)BLC_TEST
15)BEEP_TEST
16)NOTE_TEST
17)EC_IIC_RWC
18)CPU_FAN_TEST
Please Enter Test option
```

Fig-1 Run testap as Administrator”



- Build and Run PET_API TESTAP on Linux

Tool Requirement: **gcc and make**.

Build Step:

1. Unzip 20220422_Unified_PET_4.4.38.zip
2. Go to "20220422_Unified_PET_4.4.38\PET_API\Linux\x64\release" folder
3. make.
4. Built application is 20220422_Unified_PET_4.4.38 \PET_API\Linux\x64\release\TESTAP_static.

Execution Step:

1. sudo ./TESTAP_static_x64



```
$ unzip 20220422_Unified_PET_4.4.38.zip
$ cd 20220422_Unified_PET_4.4.38/PET_API/Linux/x64/release
$ make
gcc TESTAP.c -L. -lapi_x64 -o TESTAP_dynamic -lm
gcc TESTAP.c -o TESTAP_static libapi_x64.a -lm
$ sudo ./TESTAP_static
effective uid: 0
===== Portwell Inc =====
Test Menus:
1)BOARD_INFO
2)HWM_TEST
3)CPU_Info
4)EC_IIC_Word
5)EC_IIC_Byte_Write
6)EC_IIC_Byte_Read
7)EC_IIC_Quick
19)EC_IIC_Block
8)WDT_TEST
23)WDT_DISABLE
9)GPIO_READ
10)GPIO_WRITE
22)GPIO_SETDIR
11)TEST_GPIO_INPUT
12)TEST_GPIO_INPUT2
13)SMBUS_TEST
21)SMBUS_SCAN
20)SMBUS_EEPROM_TEST
14)BLC_TEST
15)BEEP_TEST
16)NOTE_TEST
17)EC_IIC_RWC
18)CPU_FAN_TEST
Please Enter Test option
```

Fig-2 Run TESTAP on Linux