

# Trace32 PER Guide

[R&D] Automotive MCU Team

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## Introduction

This documentation describes how to use the peripheral programming file.

We are providing PER files to make MCU or SIC debugging efficient.

If additional PER functions are required, it is recommended that you modify and use the PER file.

Please refer to TRACE32 peripheral guide: [per\\_prog.pdf](#)<sup>1</sup>

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<sup>1</sup> [https://wiki.telechips.com/download/attachments/410755977/per\\_prog.pdf?api=v2&modificationDate=1691474158095&version=1](https://wiki.telechips.com/download/attachments/410755977/per_prog.pdf?api=v2&modificationDate=1691474158095&version=1)

# 1 Installation

To use *Periperal file*, Trace32 powerview shall be installed.

## 2 Execution

### 2.1 Attach to running program

To start writing the peripheral file, execute PER file after attaching to running program.

Because PowerView shall read the register value from base address in PER file, attach is needed.

### 2.2 PER command

We can start writing the peripheral file through *PER [filename]* command.

If you need to more PER command, please refer to PER guide document provided by TRACE32.

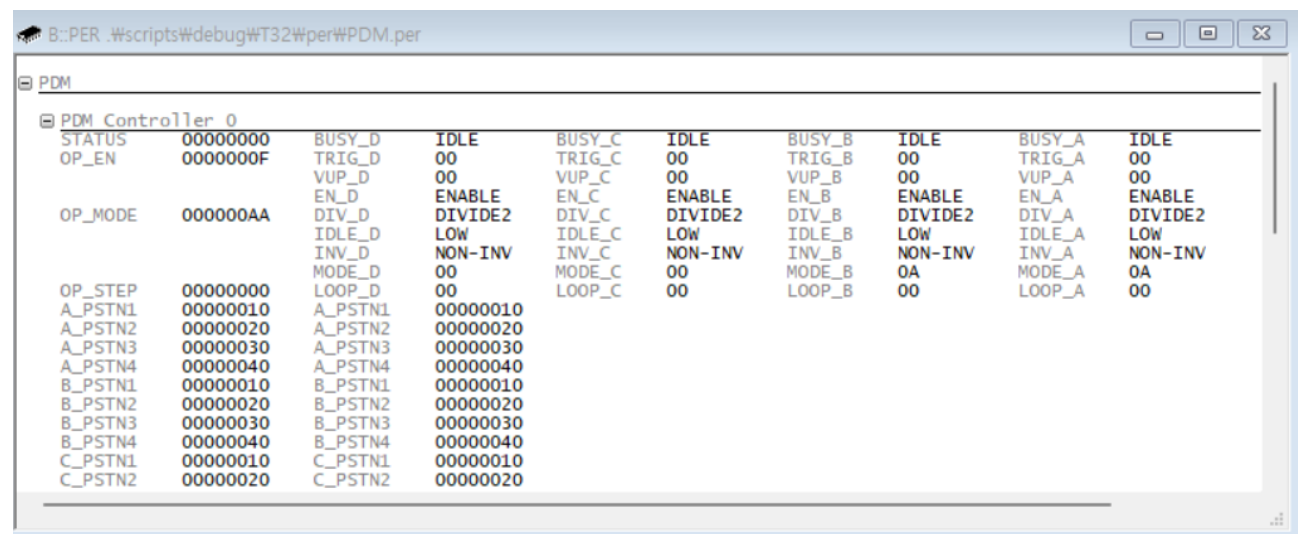
[Command example]

| Command                | Description                     |
|------------------------|---------------------------------|
| PER [filename]         | Excute the peripheral window    |
| PER.View [filename]    |                                 |
| PER.Program [filename] | Modify PER file through TRACE32 |

[Excuton PER example]

After attaching to running program, enter the command as below:

```
B::PER .\scripts\debug\T32\per\PDM.per
```



| PDM Controller 0 |          |         |          |        |         |        |         |        |         |
|------------------|----------|---------|----------|--------|---------|--------|---------|--------|---------|
| STATUS           | 00000000 | BUSY_D  | IDLE     | BUSY_C | IDLE    | BUSY_B | IDLE    | BUSY_A | IDLE    |
| OP_EN            | 0000000F | TRIG_D  | 00       | TRIG_C | 00      | TRIG_B | 00      | TRIG_A | 00      |
|                  |          | VUP_D   | 00       | VUP_C  | 00      | VUP_B  | 00      | VUP_A  | 00      |
|                  |          | EN_D    | ENABLE   | EN_C   | ENABLE  | EN_B   | ENABLE  | EN_A   | ENABLE  |
| OP_MODE          | 000000AA | DIV_D   | DIVIDE2  | DIV_C  | DIVIDE2 | DIV_B  | DIVIDE2 | DIV_A  | DIVIDE2 |
|                  |          | IDLE_D  | LOW      | IDLE_C | LOW     | IDLE_B | LOW     | IDLE_A | LOW     |
|                  |          | INV_D   | NON-INV  | INV_C  | NON-INV | INV_B  | NON-INV | INV_A  | NON-INV |
|                  |          | MODE_D  | 00       | MODE_C | 00      | MODE_B | 0A      | MODE_A | 0A      |
| OP_STEP          | 00000000 | LOOP_D  | 00       | LOOP_C | 00      | LOOP_B | 00      | LOOP_A | 00      |
| A_PSTN1          | 00000010 | A_PSTN1 | 00000010 |        |         |        |         |        |         |
| A_PSTN2          | 00000020 | A_PSTN2 | 00000020 |        |         |        |         |        |         |
| A_PSTN3          | 00000030 | A_PSTN3 | 00000030 |        |         |        |         |        |         |
| A_PSTN4          | 00000040 | A_PSTN4 | 00000040 |        |         |        |         |        |         |
| B_PSTN1          | 00000010 | B_PSTN1 | 00000010 |        |         |        |         |        |         |
| B_PSTN2          | 00000020 | B_PSTN2 | 00000020 |        |         |        |         |        |         |
| B_PSTN3          | 00000030 | B_PSTN3 | 00000030 |        |         |        |         |        |         |
| B_PSTN4          | 00000040 | B_PSTN4 | 00000040 |        |         |        |         |        |         |
| C_PSTN1          | 00000010 | C_PSTN1 | 00000010 |        |         |        |         |        |         |
| C_PSTN2          | 00000020 | C_PSTN2 | 00000020 |        |         |        |         |        |         |