# Trap

박관형

# Wave Generator
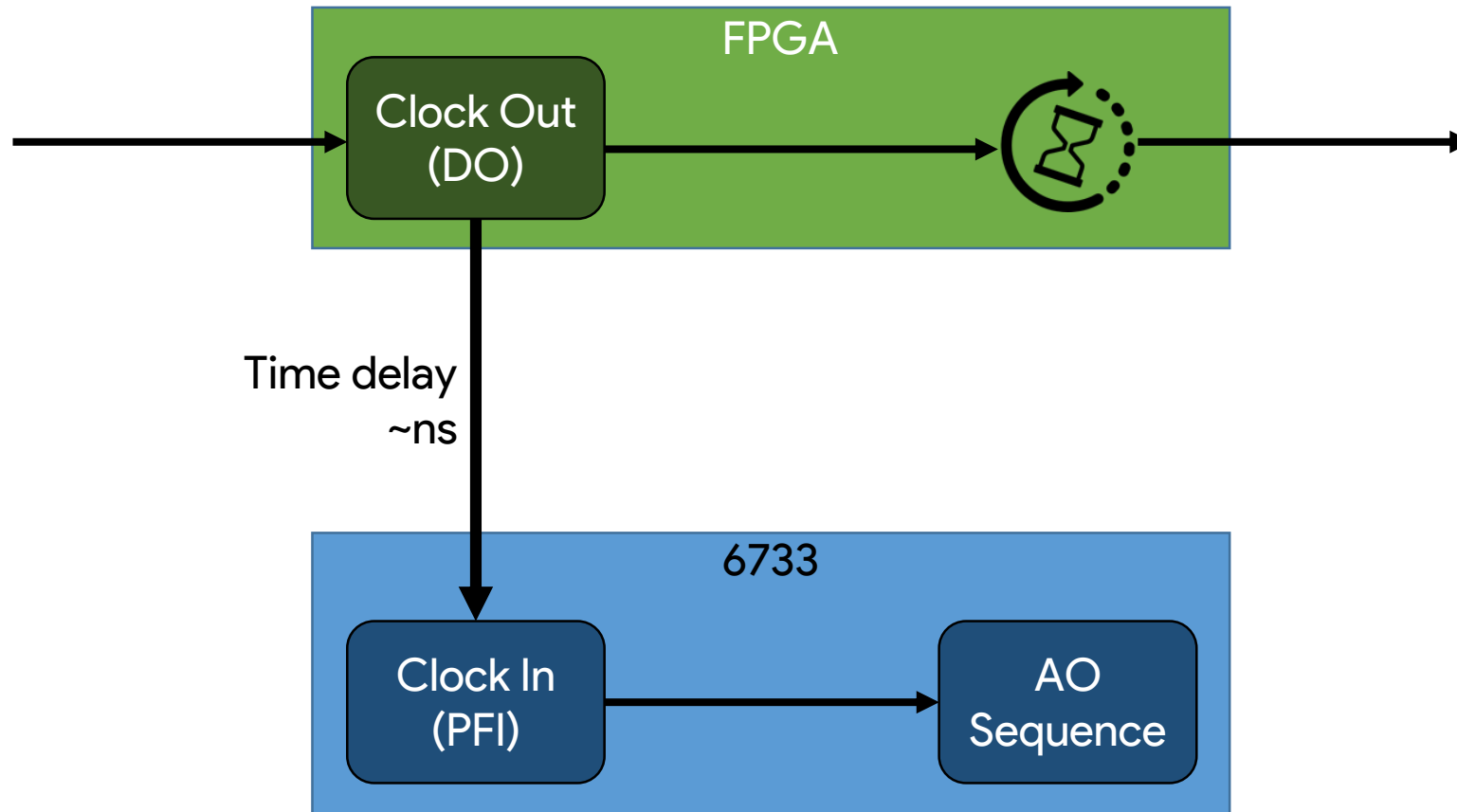


- Maximum points: 2M
- For Sampling rate 20M Sa/s →0.2 sec (Not enough)
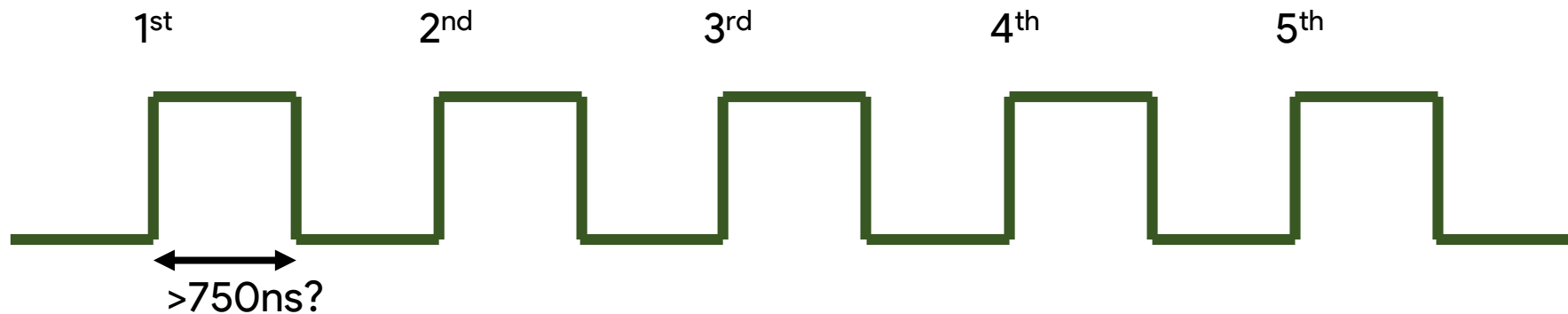
# Wave Generator_Burst

- Set RW frequency 1

- Trigger from FPGA

- <span style="color:red">Stop</span>

- Set RW frequency 2

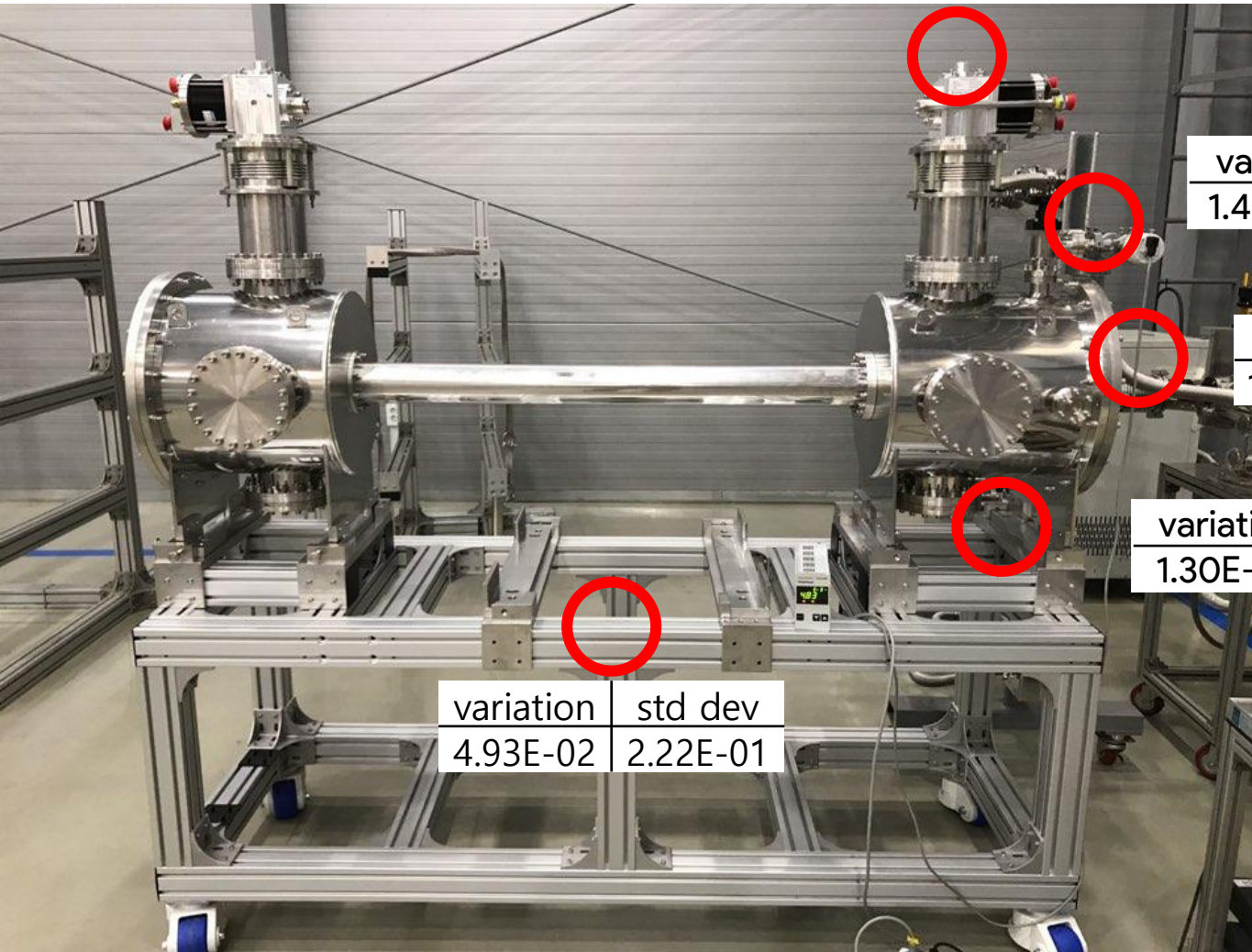- Trigger from FPGA

# FPGA – AO Timing

# AO-FPGA

| | | | |
|:---:|:---:|:---:|:---:|
| **1** | **1** | **1** | **3.3** |
| 2 | 2 | 2 | 3.3 |
| 3 | 3 | 3 | 3.3 |
| 0 | 0 | 0 | 0 |

← 1st Rising edge
← 2nd Rising edge
← 3rd Rising edge
← 4th Rising edge
← 5th Rising edge

1st   2nd   3rd   4th   5th

>750ns?

Delay: 5 tick

# Vibration



| variation | std dev |
|-----------|---------|
| 2.863E-02 | 1.692E-01 |

| variation | std dev |
|-----------|---------|
| 1.472E-01 | 3.837E-01 |

| variation | std dev |
|-----------|---------|
| 1.423E-02 | 1.193E-01 |

| variation | std dev |
|-----------|---------|
| 1.30E-02 | 1.14E-01 |

| variation | std dev |
|-----------|---------|
| 4.93E-02 | 2.22E-01 |