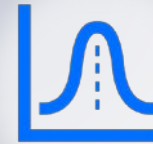


W *WeMEMS*
MEMS SCANNER

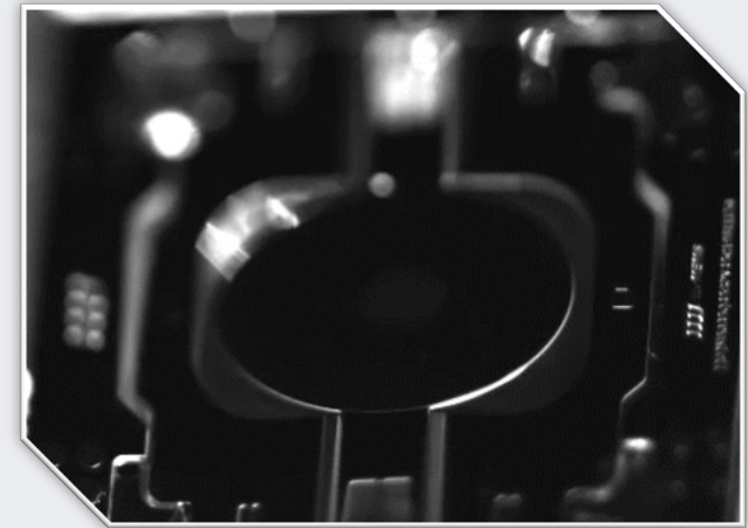


About us

Our micro solutions. Your mega innovations.

WeMEMS was founded in 2018 based on 30-year research experiences, and is currently producing micro scanners for LiDAR, AR display, optical imaging and more.

Our global competitiveness in design/production capability makes it possible to provide customized scanners within 3 to 6 months, and the patented technologies will support sustainable evolution of customer products.



Our Mission, Vision and Values



Mission

To provide quality laser beam scanners (LBS) for LiDAR, AR display and biomedical imaging



Vision

To enable our customer to find innovative solutions for three-dim detection and display



Values

To inspire and support sustainable healthy global ecosystem for safe and comfortable society



Fast speed
(~ 33 kHz)



Large scanning angle
(~ 40 deg.)



Low power consumption
(< 1 mW)



Precise position sensing
(< 1 us)



**High linearity in a
Quasi-static mode**

01. Evaluation Kit



- ✓ MEMS Scanner
- ✓ Scanner Driver
- ✓ Laser Module
- ✓ Software
- ✓ Optional Add-ons

→ One-axis MEMS mirror

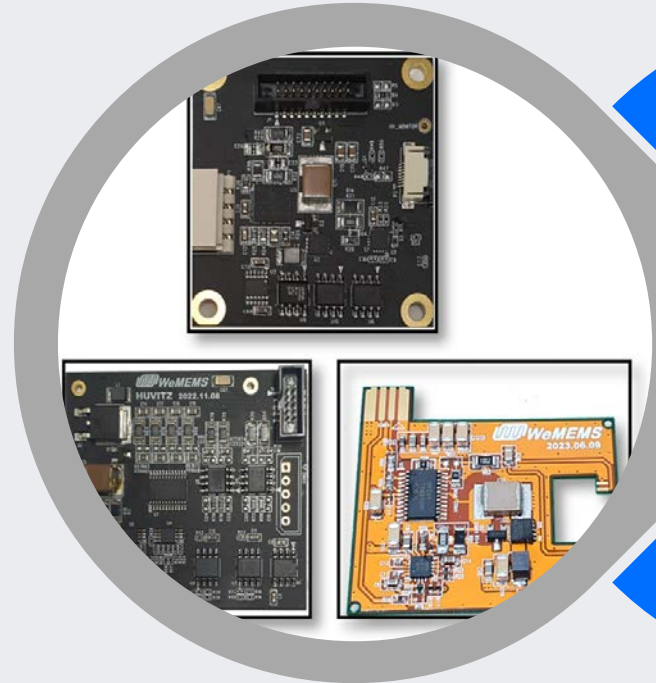
→ Two-axis MEMS mirror

→ Resonant Scanner Driver
MCU Board (DA1-SS18-V1.2)

→ Quasi-static Scanner Driver
MCU Board (DM2-AR18-V1.1)

02. Analog Driver with Scanner (1/2)

**Driving Signal
(ex. 5 V)**



MEMS Scanner



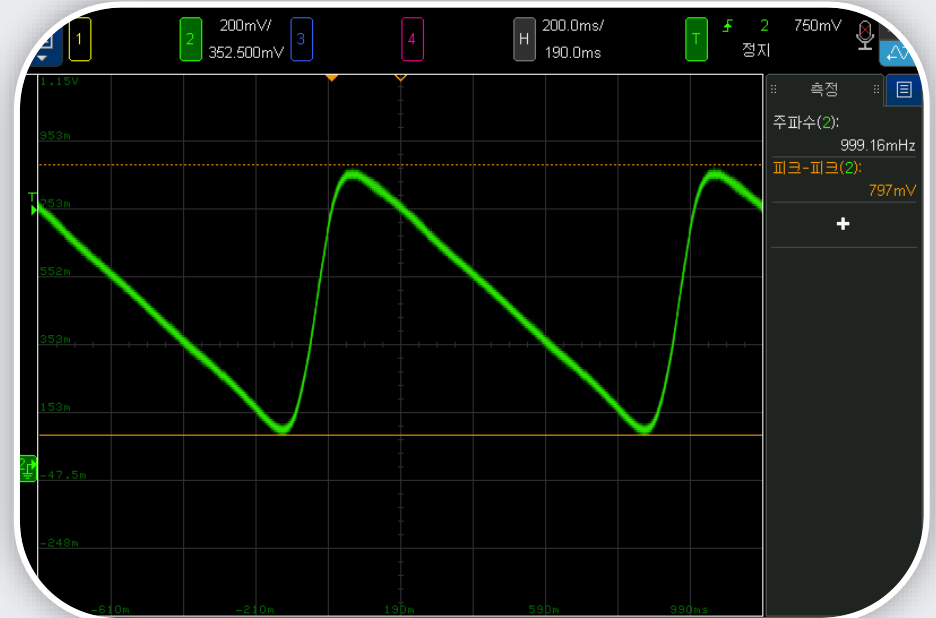
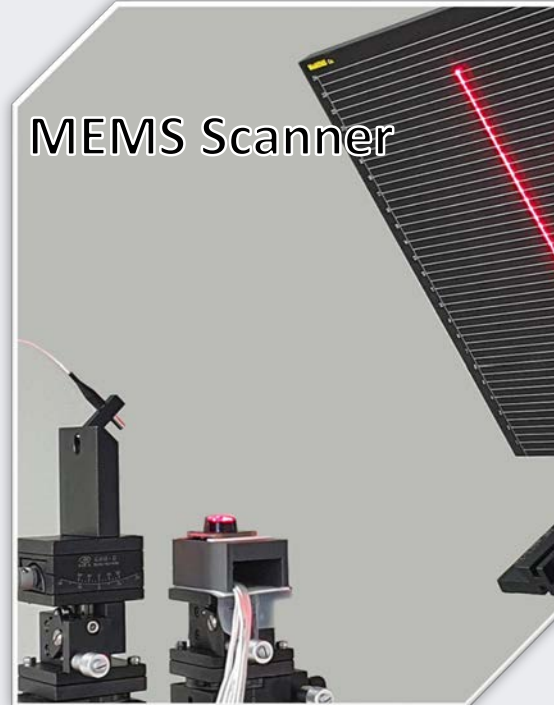
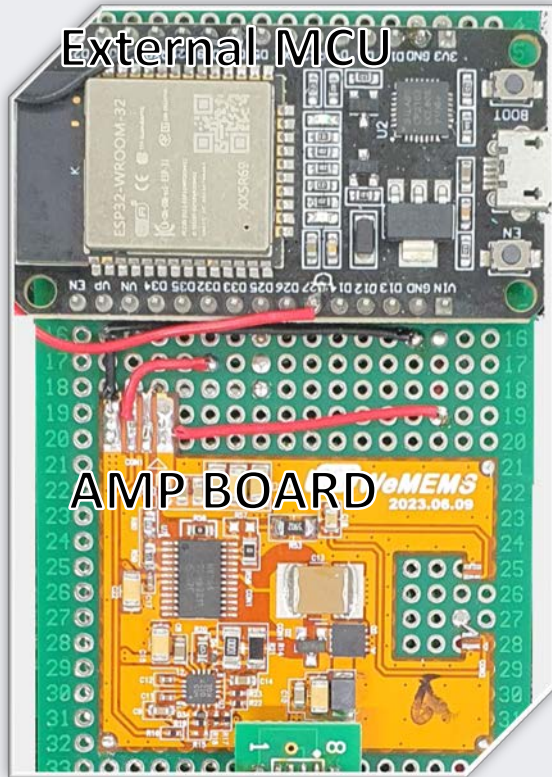
**One or Two-axis
MEMS mirror**

AMP BOARD

- Resonant Scanner
- Quasi-static Scanner

02. Analog Driver with Scanner (2/2)

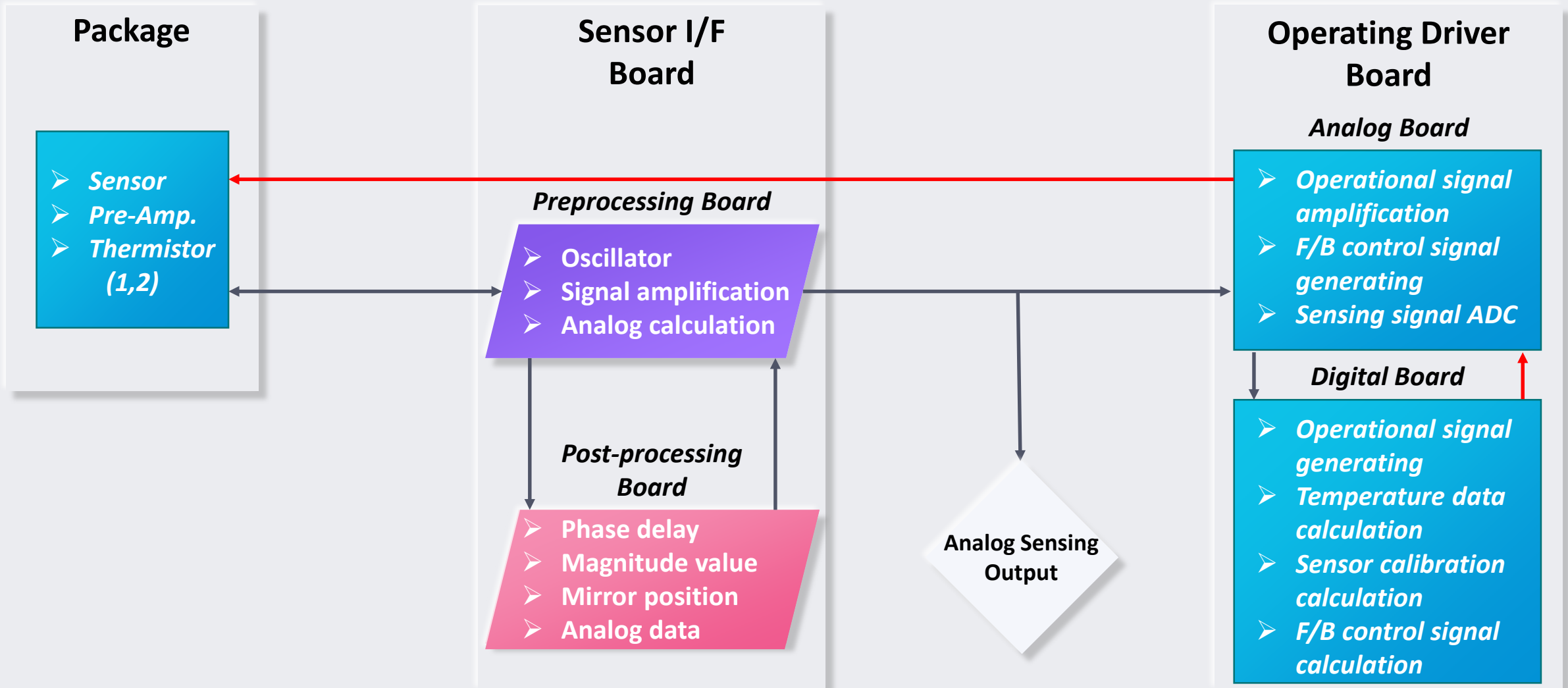
Example Screen



Input-shaping control of electrostatic MEMS scanner

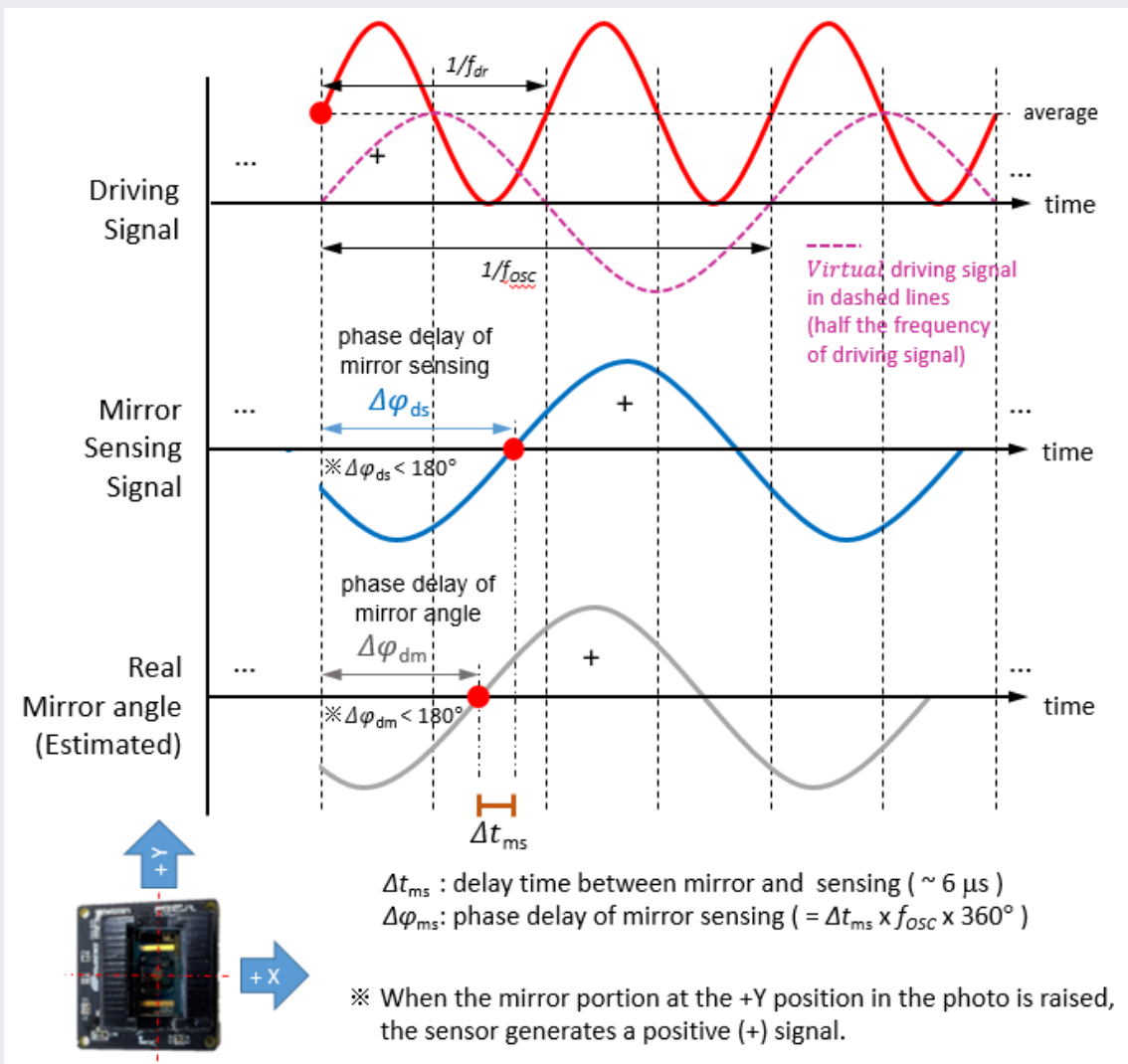
03. Sensor embedded Scanner (1/2)

Block diagram

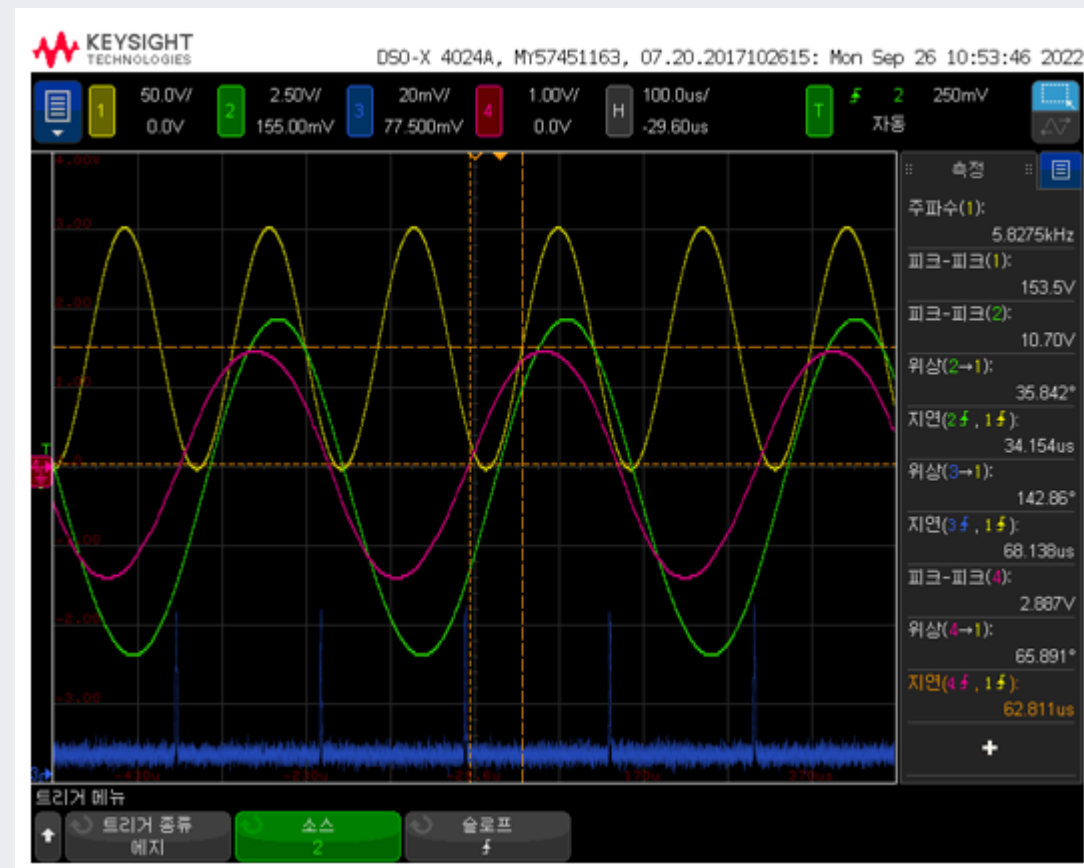


03. Sensor embedded Scanner (2/2)

Definition of Phase



Resonant Scanner Sensing output



■ Driving
 ■ Sensing
 ■ PSD 계측기 (Ref.)
 ■ APD (zero cross Ref.)