

Aroma Bit, Inc.

5C-SSM (CMOS type)

Principal Component Analysis [PCA] Data Samples

Food and Beverage

March, 2023



Data Sample 1: Food

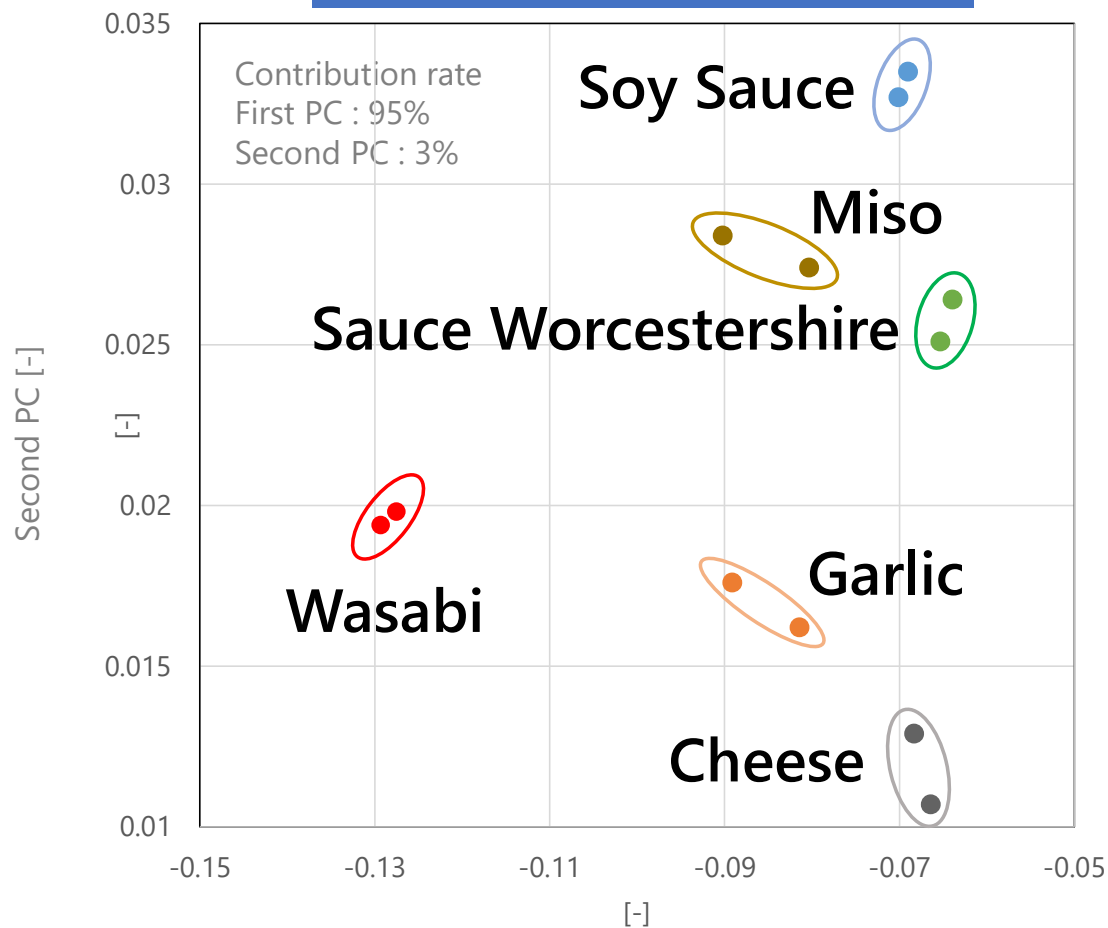
- Soy Sauce
- Miso
- Sauce Worcestershire
- Cheese
- Wasabi
- Garlic

Data Sample 2: Beverage

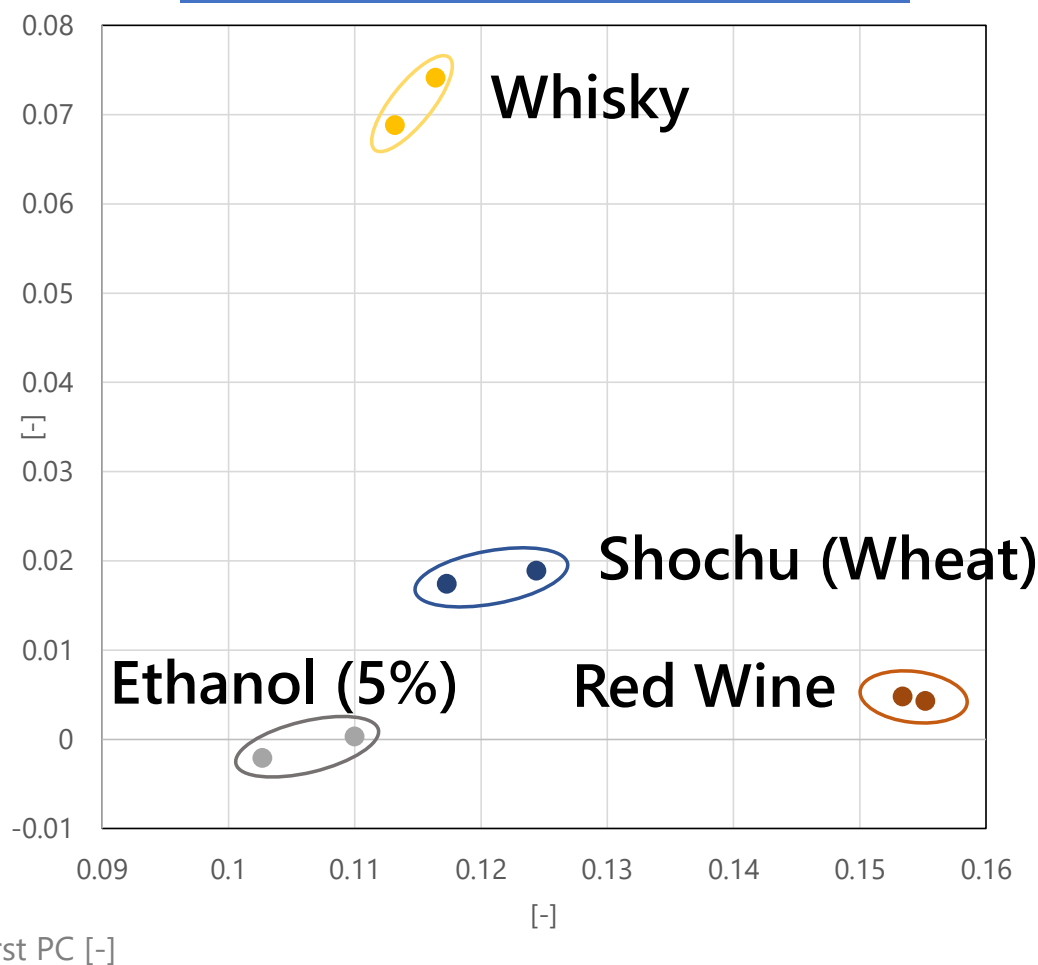
- Whisky
- Red Wine
- Shochu (Wheat)
- Ethanol (5%)

PCA Data Sample

Data sample_1 : Food



Data sample_2 : Beverage



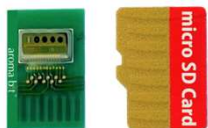
5C-SSM (CMOS type)

*This product will be sold by our subsidiary, Aroma Bit Silicon Sensor Technology, Inc..

Accumulated electric charge on CMOS sensor surface sensitively detects adsorption change of odor membranes real time, converting chemical/odor states to numerical bits.

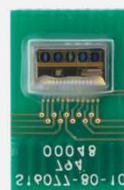
Market's top performance smell imaging sensor with its ultra compact size, high resolution, and sensitivity, equipped with 5 Aroma Bit's proprietary odor adsorption membranes on CMOS sensor elements with 16 [4x4] sensor elements per membrane or 80 pixels output per scan on 15mm x 5mm silicon die for higher S/N and production yield.

Suitable for PoC for high-volume applications.



◀ **Board Footprint**
Same as microSD.

Contents



■ Main Parts

5C-SSM (Sensor Module)



■ Option parts

COD (Compact driver)

*The microUSB cable is not included in the small driver, please use a commercially available USB cable (USB Type-A/micro USB Type-B) for PC connection.

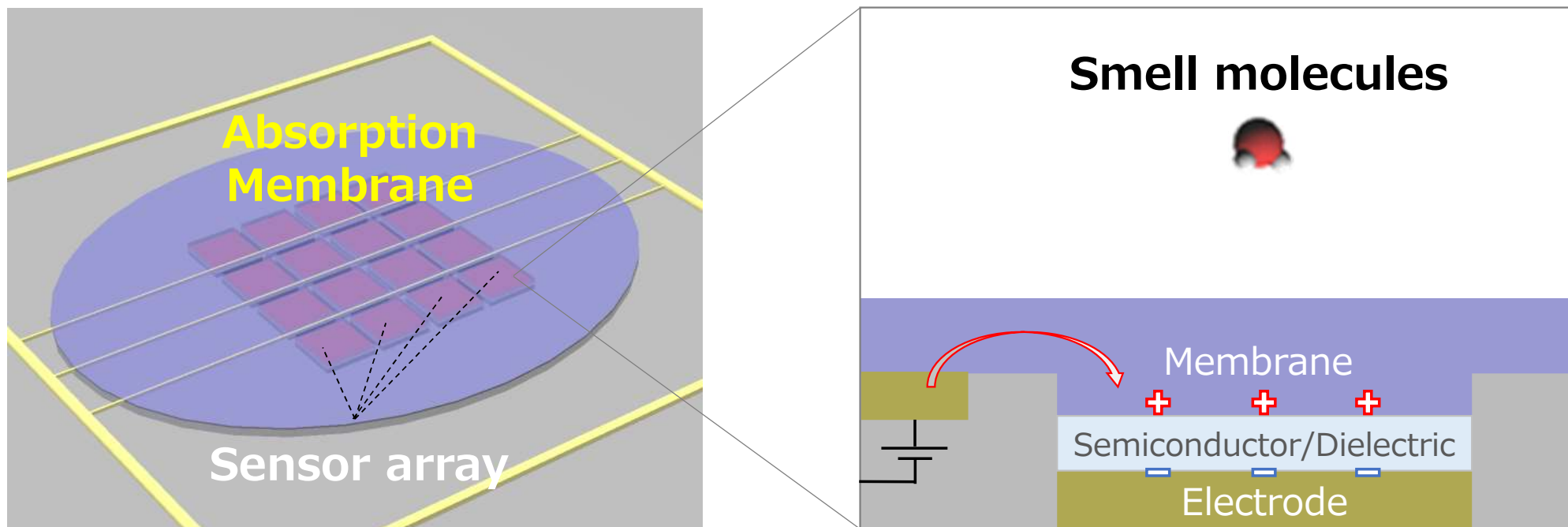


■ Option parts

CMC Unit (Intake and exhaust units)

Detection of "electrical properties" of smell molecules

The amount of electric charge stored on the surface of a sensor coated with an adsorption membrane is measured.



The smell is analyzed by measuring the effect of the change in conductivity/dielectric constant of the membrane caused by the adsorption of smell molecules on the ease of storing electric charge on the surface of the sensor (capacitor characteristics).

Quality Control

Deterioration
Detection

Product
Development

Product
Comparison

The product is intended to be used for quality control, product development, product comparison for beverages and foodstuffs.

