

- ❑ Functions as a simple AD converter.
- ❑ Contributes to reduction of microcontroller ports because of 1-wire serial output.
- ❑ Frequency (digital) output is resistant to noise and can be transmitted over long distances.
- ❑ Isolated transmission is easily possible by using isolators.

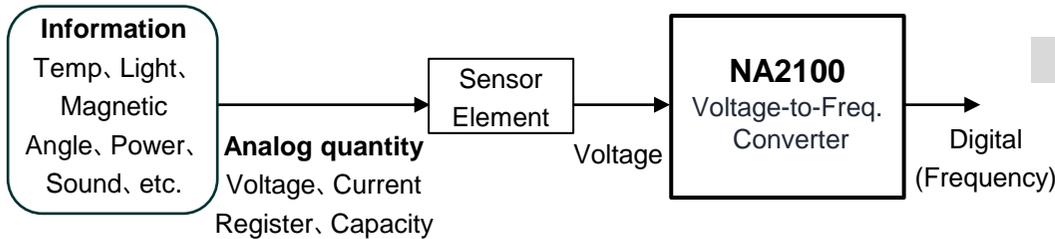
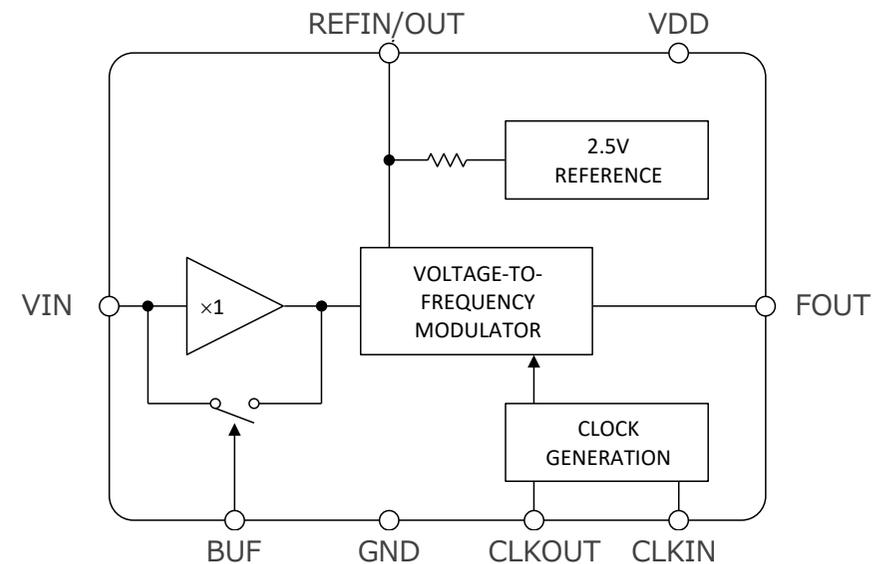
### KEY SPECIFICATIONS

- Operating supply voltage: 3V or 5V
- Low Consumption: 3mW(typ.)
- Nominal Input Range: 0 to VREF
- VREF Range: 2.5V to VDD
- Internal Reference Voltage: 2.5V±8%
- Maximum Input Frequency: 1MHz(Max.)
- Operating Temperature Range: -40°C to +125°C
- Industrial Grade Specifications

### APPLICATIONS

- Simple isolated transmission
- Simple AD converter
- Temperature controller

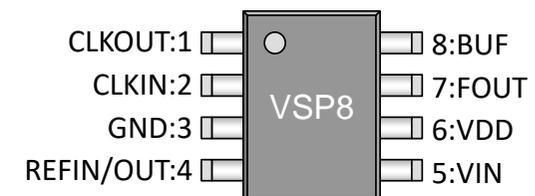
### BLOCK DIAGRAM



### PACKAGE (UNIT:mm)



VSP-8-AF  
2.9 x 4.0 x 1.1



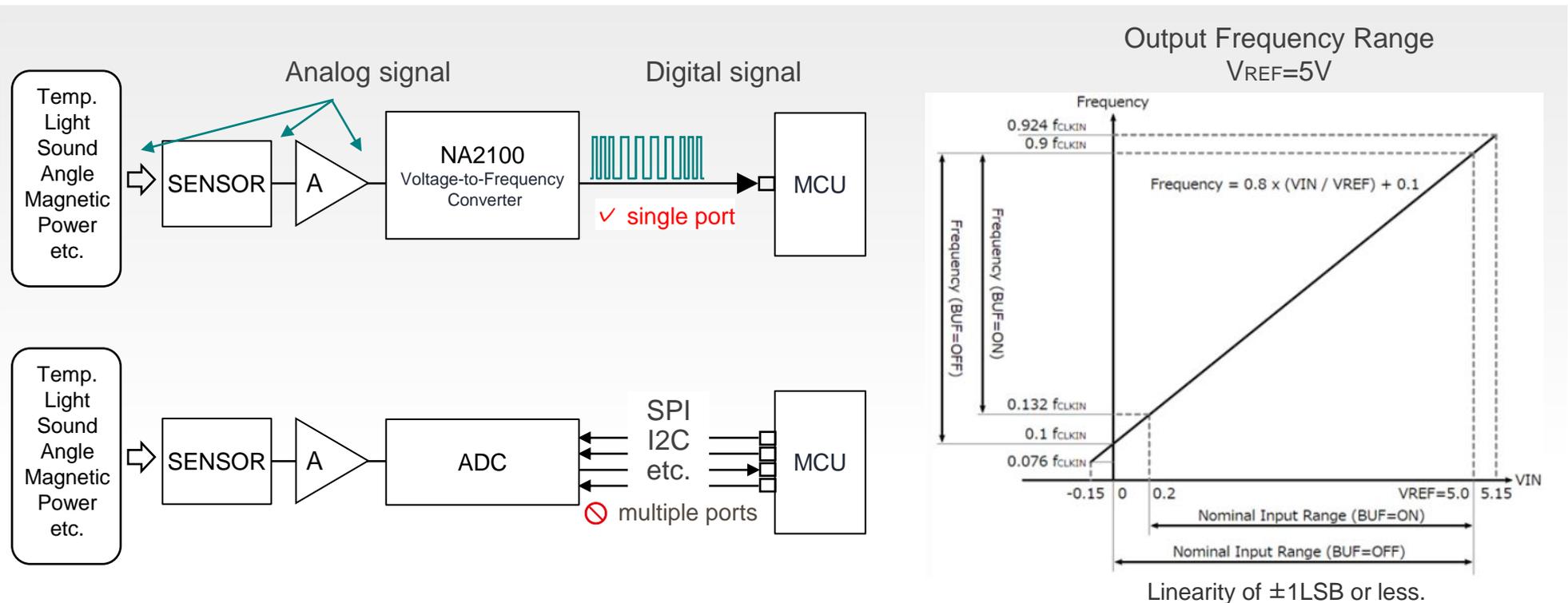
- ❑ Functions as a simple AD converter.
- ❑ Contributes to reduction of microcontroller ports because of 1-wire serial output.

### General Issue

- I want a simple ADC, but there is not much room in the microcontroller port.

### Our Solution

- AD conversion to about 12-bit equivalent (depends on MCU specifications).
- Only one port on the microcontroller is required.



- Frequency (digital) output is resistant to noise and can be transmitted over long distances.

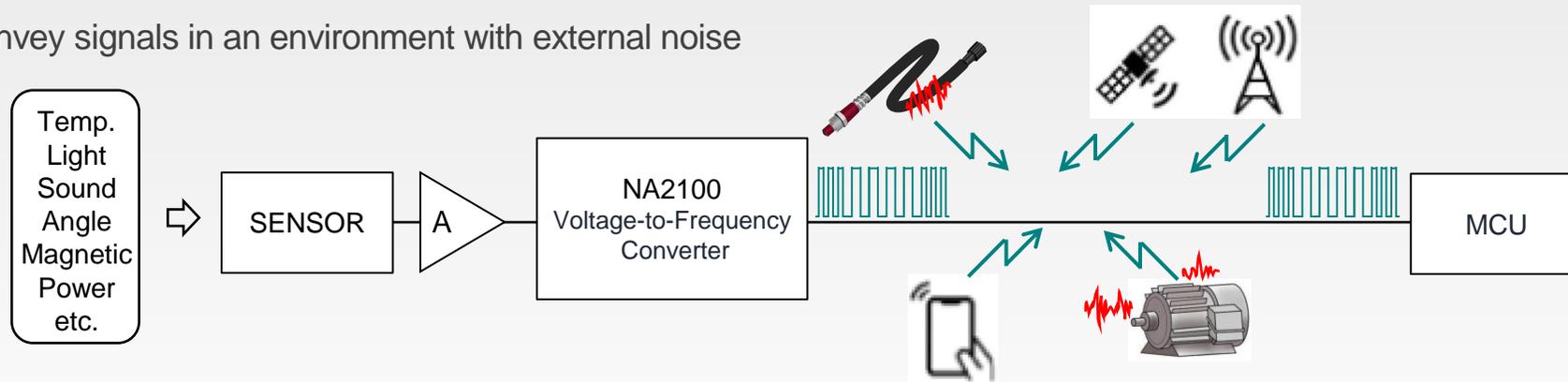
### General Issue

- Analog signals are affected by external noise.

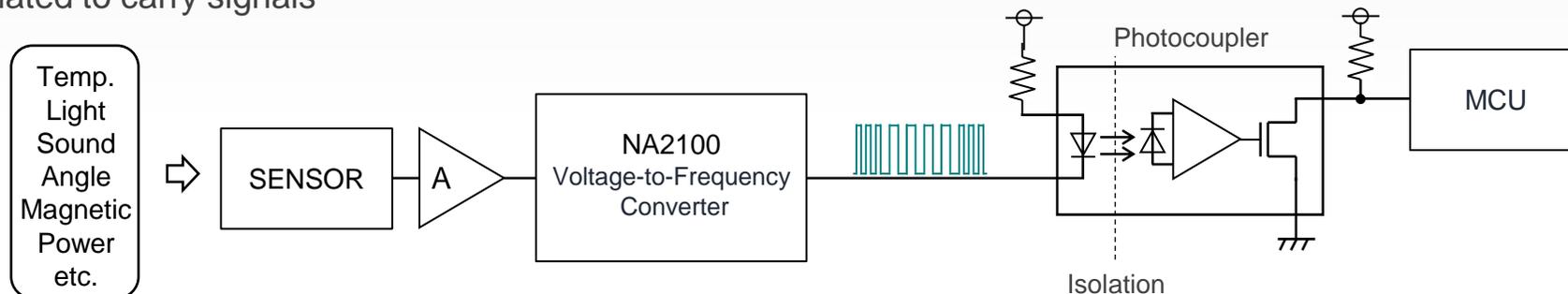
### Our Solution

- Since frequency (digital) signals are transmitted, a noise-resistant system is created.

Convey signals in an environment with external noise



Isolated to carry signals



### ORDER INFORMATION

Product Name	Package	Quantity per Reel	RoHS	Halogen Free
NA2100AF AE2D	VSP-8-AF	2000	✓	✓

### ■ PRODUCT NAME INFORMATION

NA2100 aa c dd e

Composition	Item	Description
aa	Package Code	Indicates the package AF:VSP-8-AF
c	Version	Product version A: Specified value
dd	Packing	Taping direction. Refer to the packing specifications.
e	Grade	Indicates the quality grade. D:Industrial equipment and Social infrastructures

**e** : Quality grade

e	Applications	Operating Temperature Range	Test Temperature
D	Industrial equipment and Social infrastructures	-40°C to 125°C	25°C,125°C



**Nisshinbo Micro Devices Inc.**