

Evaluation module for electrochemical CO (carbon monoxide) sensor

FIS Inc.
December 25, 2016

■ Brief specifications

Model	B1604A
Product	Evaluation module for electrochemical CO sensor
Sensor	EC-570 produced by FIS
Supply voltage (VIN)	7.0 to 12.0V DC ($\pm 2\%$ is recommendable)
Maximum power consumption	35mW when 12V DC is applied
Operating temperature and humidity conditions	-10°C to 50°C, lower than 95%RH Module has no temperature compensation. Contact us for the compensation.
Output voltage (VOUT)	VOUT=1.0V to (VIN-0.5V) Conversion equation from VOUT to CO concentration ppm = (VOUT-1) \times 357 CO 0ppm : 1.00V CO 100ppm : 1.28V CO 500ppm : 2.40V CO 1000ppm : 3.80V
Sensor output amplification factor	10 times after sensor output current is converted to voltage

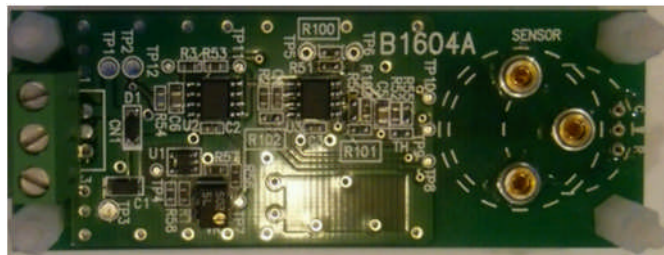
■ Wiring

Note: Be sure to insert the sensor into the socket after wiring to power supply.

Pin Number	Symbol	Function
1	VIN	7.0 to 12.0V DC ($\pm 2\%$ is recommendable)
2	VOUT	VOUT=1.0V to (VIN-0.5V)
3	GND	Ground

■ External view

Pin 1 VIN →
Pin2 VOUT →
Pin3 GND →



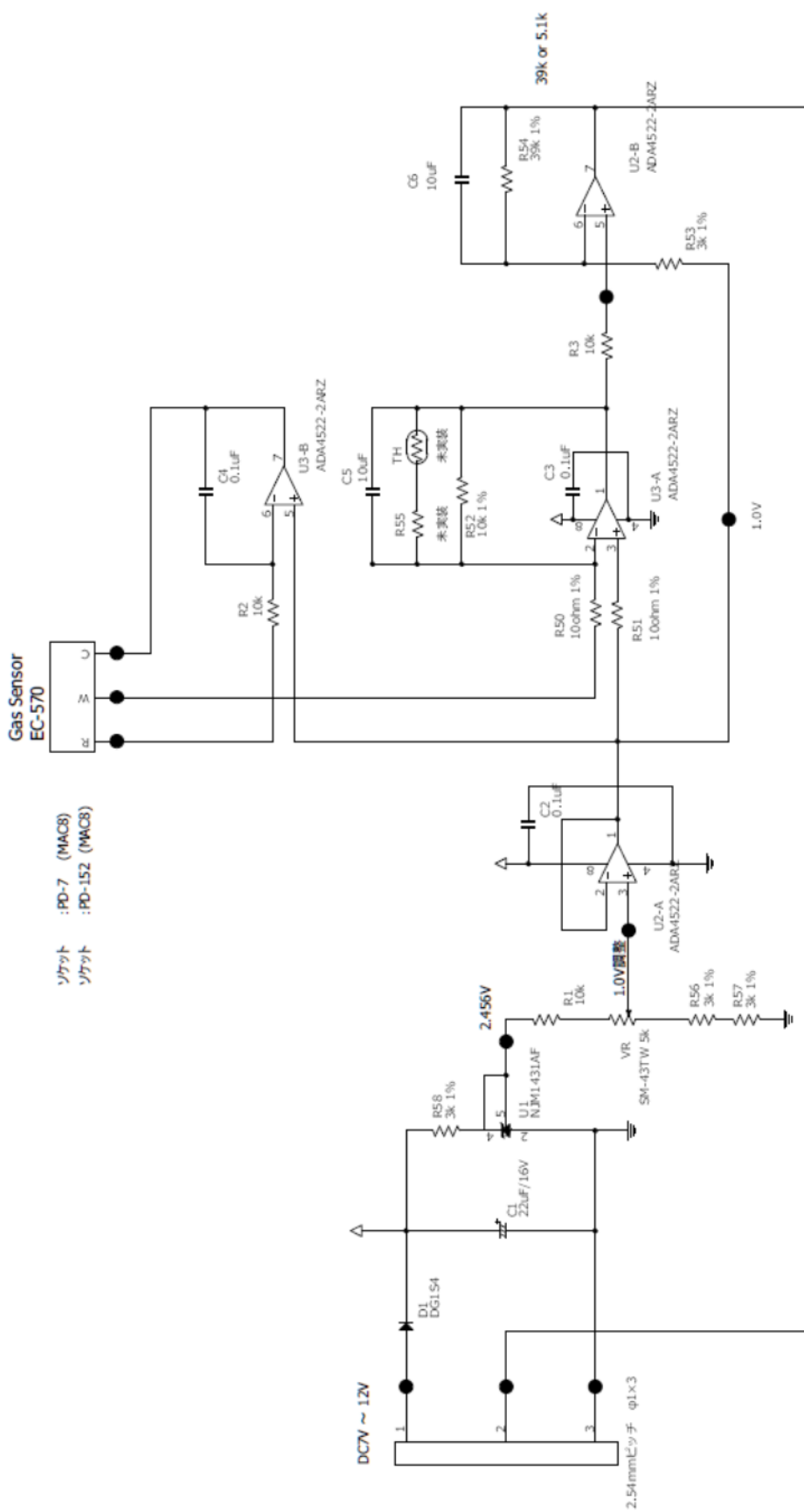
8 0 × 3 0 mm



Height: 24mm

■ Handling notes

- Confirm the sensor specifications.
- Be sure to insert the sensor to the socket after wiring to power supply. If NOT, the sensor could be destroyed.
- Gas sensitivity measurement should be made under clean air without noise gases.
- Avoid storage at high temperature and low humidity below 30%RH. Store the sensor whose electrode pins should be connected at low temperature and usual humidity.
- If the sensor is left at humidity lower than 30%RH for a long time, store the sensor in the package which is correctly sealed.
- When soldering the sensor, keep the recommended soldering conditions. Avoid reflow soldering and soldering bath.
- Do not apply voltage directly to electrode pins.
- Do not bend pins. Do not apply excess vibration, shock, or load.
- If sensor housing is damaged, do not use the sensor.
- Do not disassemble the sensor. If disassembled, you could be injured by electrolyte leakage.
- Do not blow organic solvents, paints, chemical agents, oils, or high concentration gases onto the sensor.



Designby	O.I	Date	2016.11.4	Doc/No	
Drawn by	O.I	Date	2016.11.8	Doc/Name	
Checked by		Date		回路図	
Appr by		Date		仕様	B166-0A
		Date		製品/名称	EC Sensor Evaluation Board
		Date		Ver.	Ver.

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