



For external device (PN51003) ESD protection

# Sensor

**U9 5HT40-AD18-R2**

Pin connections:

- VDD (3) → +3V3
- VSS (4) → GND
- SCL (2) → SCL
- SDA (1) → SDA
- 100nF capacitor (C19) connected between VDD and VSS.

**U11 BMP390**

Pin connections:

- VDD (10) → +3V3
- VDDIO (1) → +3V3
- GND (6) → +3V3
- SCL (2) → SCL
- SDA (4) → SDA
- GND (3) → GND
- INT/DNC (7) → GND
- 100nF capacitor (C23) connected between VDD and GND.

**U10 SGP40-D-R4**

Pin connections:

- VSS EXP (2) → GND
- VDDH (8) → +3V3
- VDD (4) → GND
- N/A (5) → GND
- SCL (6) → SCL
- SDA (3) → SDA
- 1µF capacitor (C13) connected between VDDH and GND.
- 4.7R resistor (R23) connected between VDDH and GND.
- 1µF capacitor (C14) connected between VDD and GND.

**U12 SCD40-D-R1**

Pin connections:

- VDDH (19) → +3V3
- VDD (18) → GND
- GND (16) → GND
- 100nF capacitor (C20) connected between VDDH and GND.
- SCL (9) → SCL
- SDA (10) → SDA
- DNC (8) → GND

**SCD40-D-R1:xxDCR\_SCD40-D-R1**

Peak supply current  
Typical 175mA  
Peak 205mA  
Average supply current  
for periodic measurement  
(1 measurement every 5 seconds)  
Typical 45mA  
Max 18mA