

## Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

| High Range        | Reading (μV) | Difference (μV) | Error (%) |
|-------------------|--------------|-----------------|-----------|
| Channel X + Input | 200022.73    | -12.42          | -0.01     |
| Channel X + Input | 20003.49     | -1.25           | -0.01     |
| Channel X - Input | -19998.82    | 6.77            | -0.03     |
| Channel Y + Input | 200025.10    | -10.04          | -0.01     |
| Channel Y + Input | 20007.22     | 2.54            | 0.01      |
| Channel Y - Input | -20002.34    | 3.30            | -0.02     |
| Channel Z + Input | 200028.10    | -6.82           | -0.00     |
| Channel Z + Input | 20002.36     | -2.19           | -0.01     |
| Channel Z - Input | -20003.64    | 2.12            | -0.01     |

| Low Range |         | Reading (μV) | Difference (μV) | Error (%) |
|-----------|---------|--------------|-----------------|-----------|
| Channel X | + Input | 2000.54      | -0.37           | -0.02     |
| Channel X | + Input | 201.37       | 0.50            | 0.25      |
| Channel X | - Input | -199.19      | -0.20           | 0.10      |
| Channel Y | + Input | 1999.95      | -0.89           | -0.04     |
| Channel Y | + Input | 200.04       | -0.75           | -0.37     |
| Channel Y | - Input | -199.96      | -0.85           | 0.43      |
| Channel Z | + Input | 2001.05      | 0.20            | 0.01      |
| Channel Z | + Input | 199.88       | -0.86           | -0.43     |
| Channel Z | - Input | -200.02      | -0.88           | 0.44      |

#### 2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | Common mode<br>Input Voltage (mV) | High Range<br>Average Reading (μV) | Low Range<br>Average Reading (μV) |
|-----------|-----------------------------------|------------------------------------|-----------------------------------|
| Channel X | 200                               | 5.45                               | 3.79                              |
|           | - 200                             | 3.93                               | 0.83                              |
| Channel Y | 200                               | 7.70                               | 7.39                              |
|           | - 200                             | -9.52                              | -8.90                             |
| Channel Z | 200                               | 7.51                               | 6.49                              |
|           | - 200                             | -9.21                              | -8.71                             |

#### 3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | Input Voltage (mV) | Channel X (μV) | Channel Y (μV) | Channel Z (μV) |
|-----------|--------------------|----------------|----------------|----------------|
| Channel X | 200                | -              | -1.61          | -2.84          |
| Channel Y | 200                | 8.30           | -              | 0.46           |
| Channel Z | 200                | 6.69           | 5.02           | -              |

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4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

|           | High Range (LSB) | Low Range (LSB) |
|-----------|------------------|-----------------|
| Channel X | 15919            | 14652           |
| Channel Y | 16343            | 14477           |
| Channel Z | 16033            | 14911           |

#### 5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Input  $10M\Omega$ 

| <u> </u>  | Average (μV) | min. Offset (μV) | max. Offset (μV) | Std. Deviation (µV) |
|-----------|--------------|------------------|------------------|---------------------|
| Channel X | -0.50        | -2.04            | 0.95             | 0.51                |
| Channel Y | 1.56         | 0.40             | 2.80             | 0.48                |
| Channel Z | 0.26         | -0.78            | 1.16             | 0.42                |

### 6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

7. Input Resistance (Typical values for information)

|           | Zeroing (kOhm) | Measuring (MOhm) |
|-----------|----------------|------------------|
| Channel X | 200            | 200              |
| Channel Y | 200            | 200              |
| Channel Z | 200            | 200              |

8. Low Battery Alarm Voltage (Typical values for information)

| Typical values | Alarm Level (VDC) |  |
|----------------|-------------------|--|
| Supply (+ Vcc) | +7.9              |  |
| Supply (- Vcc) | -7.6              |  |

9. Power Consumption (Typical values for information)

| Typical values | Switched off (mA) | Stand by (mA) | Transmitting (mA) |
|----------------|-------------------|---------------|-------------------|
| Supply (+ Vcc) | +0.01             | +6            | +14               |
| Supply (- Vcc) | -0.01             | -8            | -9                |

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# The photos of HAC test are presented in the additional document:

Appendix to test report No.I17Z61985-SEM02

The photos of HAC test