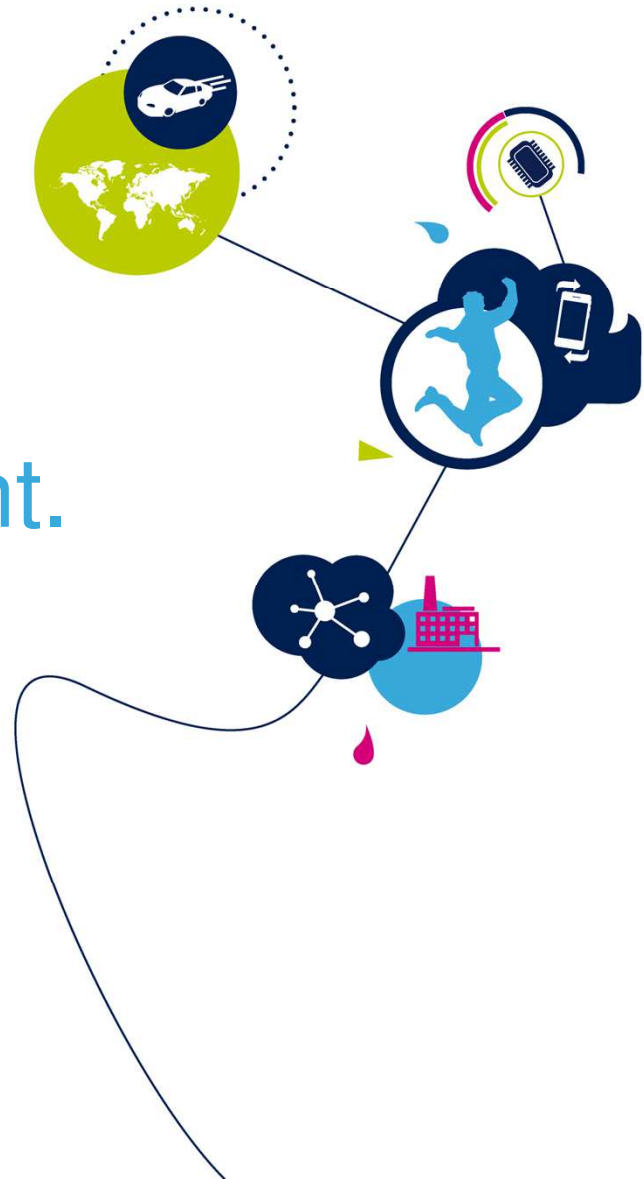


# PCN 12067 LSM6DSO products family: UTAC as additional Assy plant. Reliability Plan

AMG MEMS Q&R

March 18<sup>th</sup> 2020



# Reliability plan

2

Following slide shows the reliability plan associated to the PCN 12067 about the addition of Utac, beside St Calamba, as assy plant about LSM6DSO family.

# Reliability Plan

| Stress TEST                          | Qty  | Method  | Criteria  | Note                               | Potential failure mode |
|--------------------------------------|------|---|-----------|------------------------------------|------------------------|
| Preconditioning (PC)                 | 1000 | MSL3<br>JEDEC JESD-020,                       | 0 Failure | MANDATORY before TC,THS,<br>U-HAST | Parametric stability   |
| Temperature Cycle (TC)               | 100  | -40°C/125°C<br>JEDEC JESD22-A104<br>PC before | 0 Failure | Readout 250cy, 500, 1000 cy        | Parametric stability   |
| High Temperature Storage Life (HTSL) | 100  | +150 °C<br>JEDEC JESD22-A103                  | 0 Failure | Readout 168h, 500, 1000 h          | Parametric stability   |
| Temperature Humidity Storage (THS)   | 500  | 85°C/85%<br>JEDEC JESD22-A101<br>PC before    | 0 Failure | Readout 168h, 500, 1000 h          | Parametric stability   |
| U-HAST                               | 100  | 131°C/ 85%<br>JEDEC JESD22-A118<br>PC before  | 0 Failure | Readout 96h                        | Parametric stability   |
| ESD – CDM                            | 30   | up to +/- 750 V                               | 0 Failure | 3 pcs / level                      |                        |



**Parametric stability have to be aligned present production (assy at Calamba)**