

TASK FORCE ORGANIZATION FORM (TFOF)

Date Prepared: 11/16/2020 Revised (if Applicable): _____

Name of Task Force (TF): MEMS and Miniaturized Gas Sensing Task Force

Originating Global Technical Committee: MEMS/NEMS

Originating Technical Committee Region: North America

Submitted by: Sreeni Rao Company: TDK Invensense

Email: srao@invensense.com

Phone: 617.513.8396

Refer to *Regulations* ¶ 5.7.4.2 and § 5.7.2, and *Procedure Manual* § 2.1.4.

1. Charter: (State the objective of the proposed TF.)

As with any emerging technology, MEMS gas and environmental sensor makers today do not conform to specific or well understood standards, whether it is with regards to parameter definitions, testing methods, reliability requirements, packaging, pin configurations, communication interfaces, etc., to name a few.

The task force believes that the technology and the markets are at the right point in their evolution that the timing is right for a set of defined standards around gas sensors. We envisage that not only will this encourage the important players to focus on innovation, but also contribute to quicker adoption in application areas where customization from the ground-up can often be a barrier to commercial success.

One example of such a barrier is that it is really hard for customers today to compare different MEMS devices, or to use multiple devices within a single platform to sense different environmental gases.

The WG believes this effort will significantly expand the market for sensing products.

2. Scope: (Define the specific activities that the TF will conduct.)

The task force will focus on the following MEMS and miniaturized gas sensing topics (listed in proposed order of priority):

1. Key parameters and their definitions
2. Test methodologies and test conditions to measure and report these parameters
3. Interface standards for communication with external world and/or other MEMS devices
4. Packaging
5. Reliability requirements, definitions and test methods

3. Formal linkages with TFs in other Regions/Locales: (Show each associated TF and its parent global technical committee; indicate nature of relationship – global TF, observer TF, etc.)

SEMI MSIG Device WG

5. Leaders

Name		Employer	Telephone	Email
Last	First			
Rao	Sreeni	TDKInvensense		srao@invensense.com

5. Members

Name		Employer	Telephone	Email
Last	First			
Potyrailo	Radislav	GE Global Research		potyrailo@ge.com
Adib	Mustahsin	Infineon		mustahsin.adib@infineon.com
Deiningner	Debra	Renesas		debra.deiningner.cj@renesas.com
Smith	Merry	C2Sense		merry@c2sense.com
Stetter	Ed	SPEC Sensors		efs@spec-sensors.com
Sakauchi	Ryotaro	Bosch		ryotaro.sakauchi@us.bosch.com
Camenzind	Mark	Independent Consulting		Mark.Camenzind83@Gmail.com

6. Formation Date: *(TF formed on)*

Task Force formed on: [11/16/2020](#)

Task Force approved by Committee/GCS on: [Approved by TC Chapter on 11/16/2020](#)

Task Force recorded in minutes on: [Fall 2020](#)

7. Comments:
