1. Product Change Notification [PCN] basic data								
Customer		Name Customer:						
		Contact Email address:						
1.1 Company	Melexis INSPIRED ENGINEERING	Site submitting the change:	Melexis Sofia					
		Affected site(s):	Melexis Supplier					
1.2 PCN No.		#REF!						
1.3 Title of PCN		Active Second Source Assembly Amkor & Atec [MLX92212]						
1.4 Product Category		Active Components - Integrated Circuits						
1.5 Issue date		15-Feb-2021						
1.6 PCN revision history (optional)		1.7 Issue date of previous revision (optional)	1.8 Delta to previous revision (optional)					

2. PCN Team	
2.1 Contact supplier	
2.1.1 Name	Lisa Vanheerswynghels
2.1.2 Phone	+32 57 22 62 07

2.1.3 Email	pcn_mlx@melexis.com

2.2 Team supplier (optional)

2.2.1 Name (optional)	2.2.2 Phone (optional)	2.2.3 Email (optional)

3. Changes

No.	3.0 Ident	3.1 Category	3.2 Type of change
#1	SEM-PA-03	PROCESS - ASSEMBLY	Change in leadframe dimensions
#2	SEM-PA-16	PROCESS - ASSEMBLY	Change of direct material supplier
#3	SEM-PA-17	PROCESS - ASSEMBLY	Change of specified assembly process sequence (deletion and/or additional process step)
#4	SEM-PA-18	PROCESS - ASSEMBLY	Move all or parts of production to a different assembly site.
#5	SEM-EQ-02	EQUIPMENT	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.

4. Description of change

	Old	New

Description #1	**AMKOR:** Leadframe Pad Size: 45x64 mils (1.13x1.60mm) Leadframe Design: With anchoring hole on die paddle and locking features on leads	**AMKOR:** Leadframe Pad Size: 45x64 mils (1.13x1.60mm) Leadframe Design: With anchoring hole on die paddle and locking features on leads **ATEC:** Leadframe Pad Size: 48x66 mils (1.2x1.68mm) Leadframe Design: floating design - tie bar not connected to leadframe
Description #2	**AMKOR:** Lead frame: Mitsui bond wire: MKE	**AMKOR:** Lead frame: Mitsui bond wire: MKE **ATEC:** Lead frame: ASM bond wire: Heraeus
Description #3	**AMKOR:** - No plasma cleaning before molding - Different process sequence: Debar/Dejunk -> Plating -> Annealing -> Laser Mark -> Trim / Form / Singulate	**AMKOR:** - No plasma cleaning before molding - Different process sequence: Debar/Dejunk -> Plating -> Annealing -> Laser Mark -> Trim / Form / Singulate **ATEC:** - Plasma cleaning before molding - Different process sequence:
Description #4	Assembly Location: Current released location: Amkor, Philippines	Assembly Location: Current released location: Amkor, Philippines
Description #5		**ATEC:** Different equipment with similar capability and same principle of operation in: Wire bond, Molding, Debar / Dejunk /Trim / Form / Singulate
4.6 Anticipated impact on form, fit, function, reliability or processability?	Based on Risk Assessment including AEC-Q100 and ZVEI guidelines	
4.7 Reference parts with customer number (optional)		

5. Reason / motivation for change	
5.1 Motivation	As a responsible and future oriented player, Melexis is protecting it`s customers. This includes to secure the supply chain against environmental and/or material based events (contingency plan). The increase in business leads to assembly demand beyond Amkor, Philippines capability.
5.2 Additional explanation (optional)	

6. Marking of parts / traceability of change	
6.1 Description	No change in the marking of the parts. Traceability ensured by lot number and datecode through the Melexis ERP system.

7. Timing / schedule		
7.1 Date of qualification results	March 2021	
7.2 Last order date (optional)		
7.3 Last delivery date (optional)		
7.4 Intended start of delivery	April 2021	Please contact your Customer Relations responsible for detailed information. Note that the start of delivery can shift depending on the moment Melexis receives the customer approval.

7.5 Qualification samples available?	Samples available as of Mid March 2021	
	Samples can be requested through pcn_mlx@melexis.com	
7.6 Customer feedback required until	**19-Feb-2021**	Please provide your initial feedback through the 'Customer Feedback' sheet as acknowledgement

8. Qualification / validation

8.1 Description (e.g. qualification or validation plan/report ...)	According to ZVEI Delta Qualification Matrix and AEC-Q100. See point 10 [Attachments]			
8.2 Qualification report and qualification results	Will be available at date:	**issue date**	March 2021	**(expected)**

9. Input to customer for risk assessment process

See the risk assessment in the 4M analysis

10. Attachments (e.g. new datasheet, additional documentation, pictures, process flow, sample plan, ...)

ZVEI_MLX92212AA_TSOT3L_ATEC.pdf
Active Second Source Assembly.pdf
MLX92212 TSOT3L 4M Analysis 12Feb2021.pdf
MLX92212Ax_TSOT23_3L_Package_Transfer_Qualification_Plan.pdf

11. Affected parts

11.1 Current	11.2 New (if applicable)

11.1.1 Customer Part No.	11.1.2 Supplier Part Name	11.1.3 Supplier Part No. (opt)	11.1.4 Package Name	11.1.5 Part Descr (opt)	11.1.6 Addtl Part info (opt)	11.2.2 Supplier Part Name	11.2.3 Supplier Part No. (opt)	11.2.4 Package Name	11.2.6 Addtl Part info (opt)
NA	MLX92212LSE-AAA-000-RE		TSOT3 UP GR						
NA	MLX92212LSE-ABA-000-RE		TSOT3 UP GR						