

台灣半導體股份有限公司

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TAIWAN SEMICONDUCTOR CO., LTD.

Shindian Dist., New Taipei City, Taiwan, R.O.C. 231 Tel:886-2-8913-1588 Fax:886-2-8913-1788

Datasheet MSL OF PACKAGE Comparison Report

Prepared by Gorden Lee Approved by Danny Lin Issue date at 2017.06.29

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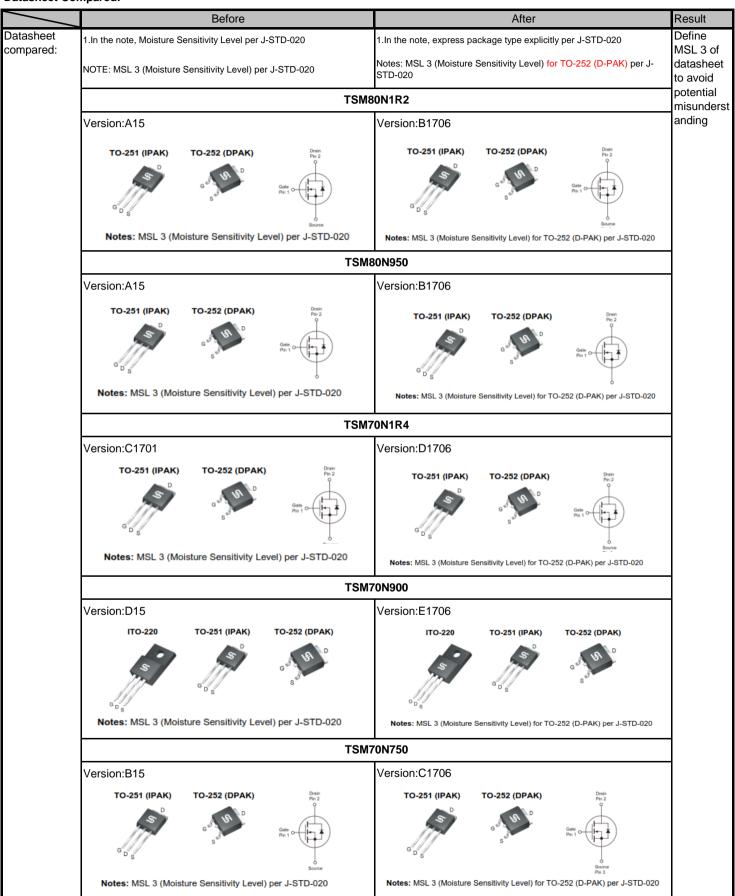
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Comparison report

Datasheet Compared:





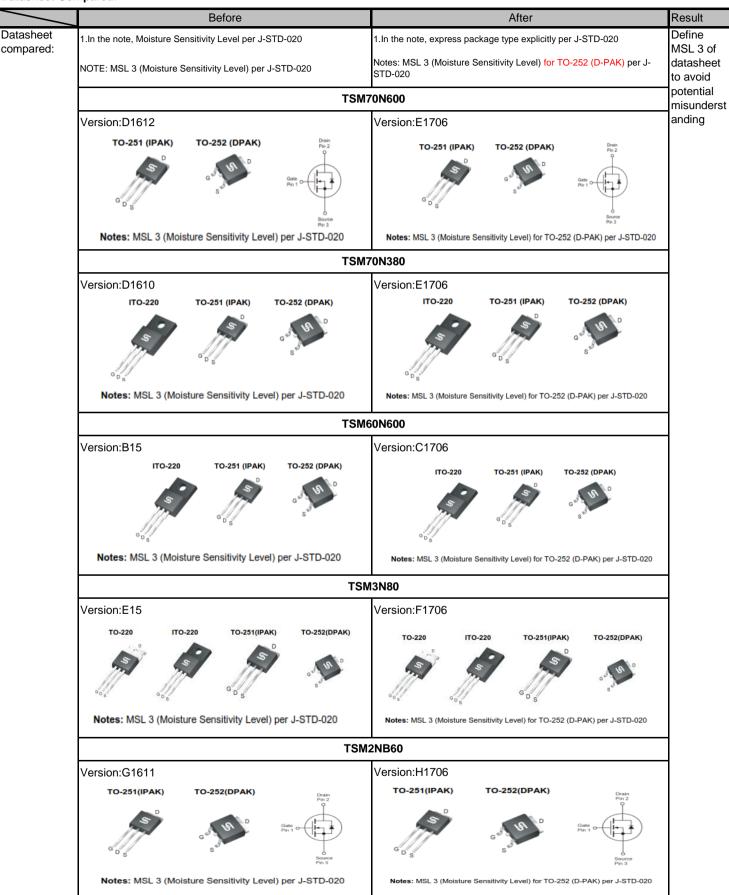
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Comparison report

Datasheet Compared:

	Before	After	Result
Datasheet compared:	1.In the note, Moisture Sensitivity Level per J-STD-020	1.In the note, express package type explicitly per J-STD-020	Define MSL 3 of
oopa.oa.	NOTE: MSL 3 (Moisture Sensitivity Level) per J-STD-020	Notes: MSL 3 (Moisture Sensitivity Level) for TO-252 (D-PAK) per J-STD-020	datasheet to avoid
	TSM	M4NB60	potential misunderst
	Version:I15	Version:J1706	anding
	TO-220 ITO-220 TO-251 (IPAK) TO-251S (IPAK SL) TO-252 (DPAK)	TO-220 ITO-220 TO-251 (IPAK) TO-251S (IPAK SL.) TO-252 (DPAK)	
	Notes: MSL 3 (Moisture Sensitivity Level) per J-STD-020	Notes: MSL 3 (Moisture Sensitivity Level) for TO-252 (D-PAK) per J-STD-020	
	TSM	 M2NB65	1
	Version:A1511	Version:B1706	
	TO-251 (IPAK) TO-252 (DPAK) Data Pin 2 Gate Pin 3	TO-251 (IPAK) TO-252 (DPAK) Cate Pin 1 Source Pin 3	
	Notes: MSL 3 (Moisture Sensitivity Level) per J-STD-020	Notes: MSL 3 (Moisture Sensitivity Level) for TO-252 (D-PAK) per J-STD-020	
	TS	M4N70	
	Version:A15	Version:B1706	
	TO-220 TO-251 TO-252 (DPAK)	TO-251 (IPAK) (IPAK)	
	Notes: MSL 3 (Moisture Sensitivity Level) per J-STD-020	Notes: MSL 3 (Moisture Sensitivity Level) for TO-252 (D-PAK) per J-STD-020	_

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Comparison report

Datasheet Compared:

	Before	After	Result
Datasheet compared:	1.In the note, Moisture Sensitivity Level per J-STD-020	1.In the note, express package type explicitly per J-STD-020	Define MSL 3 of
compared.	NOTE: MSL 3 (Moisture Sensitivity Level) per J-STD-020	Notes: MSL 3 (Moisture Sensitivity Level) for TO-252 (D-PAK), SOT-223 per J-STD-020	datasheet to avoid
	TS		potential misunderst
	Version:C1701	Version:D1706	anding
	SOT-223 TO-251 (IPAK) TO-252 (DPAK)	SOT-223 TO-251 (IPAK) TO-252 (DPAK)	
	G G G G G G G G G G G G G G G G G G G	Don't S C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S D C S	
	Notes: MSL 3 (Moisture Sensitivity Level) per J-STD-020	Notes: MSL 3 (Moisture Sensitivity Level) for TO-252 (D-PAK), SOT-223 per J-STD-020	

Worked on: (Name, Function) Danny Lin, PM																	
Date: 2017.06.28	Form provided by ZVEI - Ravision 3.0.5 - September 2016																
PCN number: IN17033																	_
Signature: Danny Lin, PM								ice evalu									
regrated circuits or conductors select AEC-Q101 Revision D					MAT ludes e.g. small signa	ERIAL PE I diodes (RFORMANCE TEST Ri pipolar - and Schottky	ESULTS (on diodes), sm	the basis of AE all signal transi	C-Q101 Restors, MOS	vision D) FETS, IC	BTs, po	wer diodes,		additio	onal to AEC- Q10x	
Assessment of Impact on Supply Chain regarding following especas supply the Chain of processes in the Chain of the Chain	Parasitating Tride on Supply Color? Understanding of seniconductors experts Exemples to explain	Purchase applicable conditions	Change with recording as a security calls	1 Revision D	Stormer Vinces - Commerce Vinces - Of Transport Commerce Inc. - Of Transport Commerce Inc. - Of Transport Commerce -	Temperaturo Cycle o Temperaturo Cycle optica Test TC Desember or Test Who Bernatinogray	Unitated by by Accelerate Test Accesses to the Second Second Test by by Accelerate Second Test by Charles by Charles Second Test by Charles by Charles Second Test by Charles Second Test Second Test by Charles Second Test	Processor Specials October 18 (19 Characteristics) October 19	Physical Denoision Terrinal Streeth Resistance to Solvens Constant Acceleration Valuation Vanisher Property	Mechanical Shock. Hermold dy. Resist to Solder Heat	Studentially Thermal Resistance Wee Bond Stength	Wee Bond Shear Die Shear	Untimplinata Setch Dielectic Integrity Brot Creat Relatitity Christotestation	Land Free	Whisher red (E.C. 600067 2-62, JEDEC JESCOOT)	Personne - Angles Compression of correspond delso chronical pates, decrined detaction	Remarks
Type of change ANY	No Yes	A Apple B Board C, Comp	The evoluation	AEC-Q10	3 4 Sabo 6	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	150 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P	8 g E 3 5	S H SS	08 21 22 23	2 g 24 25	9 5 8 25 27 28	5 20	41		
SSSA-NA-01 Any change with impact on agreed upon contractual agreements. Any change with impact on processability/immufacturability at customer, which is not covered in the matrix below.	P P Not released for technical evaluation. Any change which is not covered in the matrix					-										-	
DATA SHEET	P P Any change which is not covered in the matrix below, but risk assessment at customer is recommended.	В			1 1 1							- [-]		<u> </u>			
SIBACG-01 Clarege of databet perameters/slectical specification (retu. Insu. Jup. values) ander ACDC specification. X SIBACG-02 Connection of data shaet / areata.	p p P State of deschart because of softward change of the p P p reported. 1 P State of description of the product, only convolutions for pulsi-opinis down or for the product, only convolution of the p P p P p P p P p P p P p P p P p P p	A .													-		
SIMOS-03 Specification of additional parameters	Description of a new not presidually comed parameter. We individually one of the product. (I) Collision of new parameter which was not described by the contract of the contract with other changes.	A .	100												-		
SENCE-01 Design charges in active skinners. 1)	Any direct released changes in design I byout of P 1 Net released in the state of t	A Please check if data sheet is affected (SEM-DS-61).				3 .		• E 3				- -	м - •				
SEMCE-02 Design changes in routing . *)	Any change of widing believes elements in chip design / layout with effect on other shreet. P P Net household: Modification is signal product parameter within specified design rules.	Please check if data sheet is affected (SEM-DS-01).				3 -		• E 3					м - •			•	
SENA-CE-G3 Die ahrink ⁽¹⁾	P P Shrink of active area.) Not included: sawing shrestker/facribe line Typical shrink of die.	Please check if change in process technology (SEM-PW-99) is also affected. In case of Cu wire product please consider AEC-Q006.				•		• E •		-		٠.	м - •	. г	-		
SEMICE OF Permane restlication	integrated software by design or memory as addined by supplies. 1 Po (R. Treases encodization or update without dest) (P) (Pressum encodization or update with all face) (P) (Pressum encodization or update with affected indication present encoding and encoding e	A															
PROCESS - WAFER PRODUCTION SEXAPW-01 New / change of wafer substrate material	P P New water material. 8.g. different water material to currently rolls an extential (like change from EPI material into no EPI material).	d C In case of Cu wire product please consider ADC-Q006.				I.I .							9, M	- R	1.1		Qualification effort acc. AEC-Q100: see diffusion/doxing
553APW-42 New water diameter	P P Change of waler disarrate resulting in equipment and process changes.	C Impact on changes in SEM-PW-09 and/or SEM-EQ-01.													-	•	AEC-2000: "For broad changes that involve multiple attributes (e.g., sile, ma processes), refer to suction A1.3 of this appends and suction 2.3 of 2010, for the selection of corescase less whicheles to cover a fie the possible perman-
SSBAPW-G3 New Ireal water thickness	P P Change in final water thickness. e.g. change in final chip/de thickness	A: If thermal conductivity is affected (like MCSFET; ICBT, BCA, package, stacked dise,) C: If impact on EMIX or ESC behavior cannot be evaluated / excluded on component less! In case of Cu with product please consider AEC-0006.								x	٠.			. г			
SEM-PW-04 Change of electrically active doping/implantation element	P P Change in electrically active deping / implantation element resulting in a new technology.	A			- • 5,6,0 •		6 6	6					м	- P,R		•	
SEM-PW-45 Change of gale material / dielectrics	P Change of gate material and / or gate dielectric	A						. е •				- -	м	. Р	-	•	
SEM-PW-66 New / change of backside operation (grinding / metallization)	P P Change of bottom layer of die (between die and leadfarme), Change in process, material, or e. g. change from CrNV/Au to CrNV/Ag Alematine see SEM-PW-09	K If thermal conductivity is affected (like MCGFET; IGBT, BGA package, stacked dies,) K If impact on EMC or ESD behavior cannot be evaluated /					z •										
SESA-PPV-COT New / change of metalization / visa / contacts	Alternative see SSM-PW-09 Change in metallization of bondpade, material, layer bickness specifically for chip frontaids and internal layers, change from ASSCU to ADU a, p, change in over pad metallization layer.	excluded on component level. C In case of Cu wine product please consider ADC-Q006.			8 .			• E •									
SEM-PW-68 New / change of possibilition or die coating (without bare die)	byers. Byers et lop byer on die (between mold e. g. dange in over pad metallization e. g. addition of polyknide e. g. addition of polyknide	Change of intrinsic mechanical stress might influence electrical function									$\perp \! \! \perp \! \! \perp$	-				<u>.</u>	
SEA-PW-CO Change in process inchrology (e. g. process changes like lithography, etch, colds deposition, diffusion, die lack surface preparation/backgrids)	compound and day. in process six-brokey does not refer to the charge in process six-brokey does not refer to the charge in process six-brokey does not refer to the charge in process six-brokey one of the charge in process six-brokey one industrial to the industry of the fail product. P If the charge in process six-brokey can disclose the charge of layer finiteness.	In case of Cu wire product please consider ADC-Q006.														•	Qualification effort depends on type of change.
SEM-PW-10 Process integrity tuning within specification	Vacation within process specification (): If suring within process specification	C Please check # DATA SHEET is affected. Please check # SEE-PW-49 is affected.													-		
SEM-PW-11 Change of water supplier.	(-): If no remaining risk in supply chain exist (-): By If the change of water suppler can inflamme the tamping of the final product. (F): By a change of water suppler can inflamme the tamping of the final product. (F): By a change subject with impact on substant remained and of excisted behavior.	Not on component, tested on test shuckes (spicial for IC). Interaction on component less for discrete component especies in case of SCI substate IPE properties have to be qualified. Please check if SEM-PW-01 and SEM-DS-01 is affected.				-							9, M	- R	-		Qualification for IC & p-Controller difficult on product level. Characterisms only on leaf structure. AEC-2000: "For broad changes that involve multiple attributes (e.g., site processes), refer to suction AE of this appendix and suction 2.3 of DTM the selection of worst-case test whicles to cover all the possible permute.
SEM-PW-12 Charge of specified water process sequence (debtion and/or additional process shep)	Any change which is not covered by arother type of change, this is to be assessed. — P (+) I have the Supply chair (white control of the supply chair (white country) is not supply the supply fail for Supply chair (white country).											- -			-		
SEM-PW-13 Move of all or part of water tab to a different location/hile/subcontractor	P Water lab transition with additional changes (described abows).	A In case of Cu wine product please consider AEC-Q006.	•	•				• E •			- • •	•	м • -	- A,UP,R;	s -	•	AEC-Q100: "For broad changes that involve multiple attributes (e.g., site, processes), refer to section A1.3 of this appendix and section 2.3 of Q10 the selection of worst-case test selectes to cover all the possible per
SZSA-PW-14 Liteography	Change in process buchings for Bhographic process and material — process and material — pi-1 Fine change in process buchoulday down of the pi-1 Fine change in process buchoulday down of the pi-1 Fine change in process buchoulday down of the pi-1 Fine change in process buchoulday down on the down the mapping of the fine product without the mapping of the fine product.	C Please also check changes described under EQUIPMENT.			- 4 4		- 6,7				1			. Р	-	•	
SEBAPW-15 Odds / Interfeyer Dislactric	Change in process technique for code il Interloyer delectric pricessi delectric pricessi P bitanci pricessi P bitanci bei mingrij of the facili process. (P): E fine change in process technology dani od infrance fine in	A Please also check changes described under EQUIPMENT.					6 6	• E 6						-		٠	

			1	i i																			
SEM-BD-02	New / change of frontside metalization	P P	Change in bondpads, material, pad pitch, surface changes, layer thickness	e. g. change from ASICu to AICu e. g. change in over pad metalization		In case of Cu wire product please consider ADC-Q006.															-		
SEM-BD-03	New / change of backside metallization	РР	changes, bayer thickness Change of bottom layer of die (between die and leadframe). Change in process, material, or dimensions.	e. g. change from CrNV/Au to CrNV/Ag	A							-										•	
SEMBD-04	Change of water salap or number of possible good dies on water.	I P		(R: e.g. change from 250 to 240 good dies on water (P): e.g. information change for pick & place machine.	В							-											
SEMBO-05	Change of optical appearance of wafer edge region (like inside coverage or edge exclusion)	I P	Selection of dies in water edge region which have full electrical functionality. (It: in case of water edge is affected only (P): in case of single die is affected	(Rr e.g. appearance of water edge (rounded instead of square) (P)r e.g. polyimide as new costing on die	В																	•	
SEM-BD-06	Die acribe or separation	I P	Needed information for saving and pick & place machine. (I): If the change in saving process does not influence the integrity of the final product. (P): In case if product is delived on water.	(it e.g. if product is delivered as known good die (in tape and real) (iffic e.g. Information change for pick & place machine. e.g. Information change for asseting machine.	В	Please check if SEM-80-04 is affected.						-											
SEM-BD-G7	Die Preparation / Clean	P	Change in process technique for die preparation / cleaning (-): If the change in process does not influence the integrity of the final product (P): If impact on product integrity is anticipated.		В	Please check if SEM-80-96 is affected.															-		
SEM-BD-08	New / change of passivation or die coating PROCESS - ASSEMBLY	РР	Change of top layer on die.	e.g. addition of polylimide e.g. change of polylimide thickness	В	In case of Cu wire product please consider ADC-Q006.																•	
SEM-PA-01		РР	Change in dimensions of existing package.	e. g. changes in package dimensions (further development).	В					T				• • • B	ннн	н.	1.1.1				Τ.		
SEM-PA-02	Change of leadhame base material	РР		e. g. change from alloy42 to copper e. g. change between two different copper alloys	В	In case of Cu wire product please consider AEC-Q006.										-	• 2				G		
SEM-PA-03	Change is leasthame dimensions	P P	Change in leadrane dimensions which has impact to the specified electrical parameter acc, data wheat or specification (e.g., heat sink, pin dimensions, die padde sine,) Net included: 'Unitation within specification.			ESD investigations are only necessary if internal ground and power supply connection of leadframe is affected. At it impact on EMC behavior cannot be evaluated / excluded on component issue. In case of Cu wine product please consider AEC-0006.										н -							
SEM-PA-04	Change of lead frame finishing material / area (internal)			g. change from Ag flash to NIP protection layer e. g. change from Ag spot to Au spot e. g. increase of silver plating area	с	In case of Cu wire product please consider AEC-Q006.		р.		. с	. с	С		- D - D		н -	рс:	.с - с					For wire bond strength test: Pre- & Post-process change companison to evaluate process change robustness (AEC-Q101).
SEM-PA-05	Change of lead and heat slug plating material/plating thickness (external)	P P	Change in material and / or process resulting in a new technology (e.g. pure tin).	e.g. change in heat skip stack e.g. change from Sn into NiPdiVia e.g. change of layer trickness	В											н -							
SEM-PA-06	Sump Material / Metall System (internal)	РР		e.g. change of layer thickness e.g. change to Pb-free material e.g. change of copper pilars	С														1.				
SEM-PA-07	Die artsch material		Change of die sitsch material and / or process resulting in a new technology (e.g. soft solder, aposy, etc)	- wide or empty bridge	с	A: If impact on EMC behavior cannot be evaluated / excluded on component level (if die attach has impact on electrical conductivity). In case of Cu wine product please consider AEC-0006.				١.						н.			٠.	- A,X			
SEM-PA-OI	Change of wire bonding			e.g. change from Au to Cu material e.g. change from 25µm to 25µm diameter e.g. change from single to double bond e.g. change from slich bond to slich on ball bond.		In case of Du wine product plasses consider AEC-0006. It in case of bond diagram change and EMC cannot be evaluated on corporate level. Please also check changes described under EEM-001. In case of Du wine bonding plasses consider AEC-0006.										٠.							Parameter Analysis. Saintly required only for Power devices. In general: Site audit for makerial change with impact on bondprocess (e.g., from Au to Cu) incommended. ALC-0/600. The Stread changes that involve multiple satisfules (e.g., site, resterials, processes), refer to section ALS of this approximated section 2.3 of CHOS, which hallows for the selection of varies asset selections for our at the possible permissions."
SEM-PA-O9	Substitute / Interposer	P P	Change of BGA substrate	e.g. changes in routing	В	A: Impact on EMC behavior cannot be evaluated / secluded on component living. A: If the expect of the expect of secluded on component living. A: If Impact on electrical fundion is not excluded on component level. In case of Cu wine product please consider AEC-C006.																	
SEMPA-10	Dis Gercost / Uxdertill	Р	Supporting layers for complex packages like Rip chip and J or change in process resulting in a new sechnology. (-): If change does not influence the integrity of the treat product. (P): If impact on product integrity is articipated.	(-): e.g. change of dispensing speed (P): e.g. change of underfill material	С				•			٠				н.							
SEMPA-11	Charge of mold compound / encapsulation material	P P	Change of mold compound / encapsulation material.	e.g. change to green mold compound e.g. change of filter particles		A impact on Person mechanical stress caused by interests of mold compount, interconnecting such noticity and carrier is selected minimization project for Power Debutss), soft of the project of the Power Debutss, the project of the project of the project of the sessessed of possible changes in permeability of model compound could affect single inhalance (e.g. digital signal processed), in case of Cu wire product please consider AEC-0006.							•	• • · B		н•	· • -			- A,F,#			
SEM-PA-12	Change of harmetic sealing	РР	Affected areas are material and process of hermetic (e.g. ceramic) packages, capped die and	e.g. change of sealing material for RoPG	В	A impact on EMC behavior cannot be evaluated / excluded on component level (if encapsulation / sealing has impact on		н -		- н	- н	н		н - н -	ннн	нн							
SEM-PA-13	Change of product marking		mailed divices (e.g. pressure sensors) Change of marking on device and / or change in process resulting in a new schoology. (I): If change does not influence the integrity of the treal product. (P): If impact on product integrity is anticipated.		В	electrical conductivity).								в									
SEM-PA-14	Change is process technology (e.g. sweing, die stechnology, die sweing, die stach, bonding, moulding, plating, trim and form, lead frame preparation,)		(): If the change in process technology does not	(P): e.g. change from ball band to attich	В	Please also check changes described under SEM-EQ-01. Please check if change is described by specific type of change in this matrix.																	
SEMPA-15	Process inligitly: tuning within specification		Variation within process specification (): If tuning within process specification does not influence the integrity of the final product. (P): If impact on product specification is anticipated.		с																-		
SEM-PA-16	Change of desci material supplier	Р	Change of suppliers for direct materials which are used in assembly process (DOM). (-): If change does not linfluence the integrity of the final product. (P): If impact on product integrity is anticipated.	(-): e.g. change of wire material supplier. (P): e.g. change to new mold compound supplier e.g. additional leadname supplier with specific leadname manufacturing technology	с	Please check if material is changed			-				-								-		See change of material.
X 553APA-17	Change of specified-easembly process sequence (deletion and/or additional process step)	Р	(-): no influence in final product integrity or specified sequence (P): influence in final product integrity or specified sequence	(): e.g. additional cleaning step e.g. deletion of optical inspection (Pic.e.g. change lead finishing pre-trim & torm to post trim & form	с																	-	Qualification depends on apecific change.
SEM-PA-18	Mow of all or part of assembly to a different location/site/subcontractor.			e.g. dual source / lab strategy	с	A or B: Impact on other type of changes described under PROCESS ASSEMBLY and SEM-00-01. In case of Cu wine product please consider ADC-0006.			•			•	•		н	н.	- -			- AJ,S,X	# G	٠	Whilelar tests have to be done on monitoring basis! AEC-0100: "For broad changes that involve multiple attributes (e.g., site, materials, processes), refer to section AE of this approximate and section 2.3 of 1000, which allows for the selection of veroid-case less which its to ocer at the possible permutations.
SEM-PA-19	Die scribe or separation	Р	Separation process from single water to dies. (): If the change in process does not influence the integrity of the final product. (P): If impact on product integrity is anticipated.	(): e.g. change of kerf width (P): e.g. change from sawing to laser cut	с					٠.			•								-		
SEM-PA-20	Dis Preparation / Clean	Р	Change in process technique for die preperation / cleaning (): If the change in process does not influence the integrity of the final product (P): If impact on product integrity is anticipated.	(): e.g. change of cleaning time.	с					- .		•								. х	-		
SEM-PA-21	Midding / Encapsulation process	Р	Change in process technique for molding / encapsulation. (—): If the change in process does not influence the integrity of the final product. (P): If impact on product integrity is anticipated.	[]: e.g. turing within process specification	с			• -				•	•	• • · B		н •				- A,#	-		
	PACKING/SNEPPING Packing/shipping specification change	РР	Packing/shipping specification change.					1.		1-				1-1-1-1	1.1.		1.					_	
SEM-PS-02	Dry pack requirements change	PP	MSL)		•							-											
	Change of carrier (tray, see) Change of labelling		Change of carrier (tray, reel) Change of labelling also on reel. (6: Change of material label without impact on barecode. (9): Changes of material label information which affects data processing at customer.	(i) e.g. additional information (RoPG stamp) (P) e.g. change of defined nomenclature for data processing	В																		
SEMEQ-01	ECOMMENT Production from a new equipment/food which uses a different basic behnology or which due to its unique form or function can be expected to influence the integrity of the food product.				A																		Affected process change is to check.
				e.g. dambar cutting (mechanical to laser cutting)						ш						ш	ш						

SEMEQ-G	Production from a new equipment/final which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.		PCN required for dedicated equipment for sensitive component production. (-): If change does not influence the integrity of the final product. (P): If impact on product integrity is articipated.	(-): e.g. extension of esisting equipment pool (PF; e.g. extension of disdicated equipment in case basic technology still need to be proven	с				 		 	 	 			
SEMBO-O		Р Р	Change in electrical water text equipment type and/or final text equipment type that uses a differen technology (e.g. new text program, new texter interface,).	e. g. change tester equipment from LTX to Teradyne	с				 	-	 	 	 			Gage RSR / delta correlation
	TEST FLOW															
SEM-TF-01		РР	Tester transfer or relocation. Check impact on SEM-AN-01	Dual source strategy	С				 	-	 	 	 	-	 •	Gage RSR / delta correlation
	Q-GATE															
SEM-QG-01	Ourge of the last coverage-having process flow used by the applier to smare data thest complexion (a.g. alternation/addition of electrical measurementhant flow block, releastorise/shurcament of envolving processor or sweeping)	Р	e.g. test flow block, reduction from these temperature measurements to two temperature reseasurements, change in burn in / run in process. (-): If change does not influence the integrity of the final product. (P): If impact on product integrity is articipated.	(): e.g. test implemented without customer requirement (PF; e.g. reduction from three temperature measurements to two temperature measurements e.g. change in burn in / run in process.	С		٠		 		 	 	 			Parameter Analysis: Data correlation * For "burn in" changes ELFR recommended
	•															
	Tests, which should be considered for the appropriate process change.				Α				 		 	 	 			-
	Tests, which should be considered for the appropriate process change after select	ion of cond	ition table.						 		 	 	 			
	Suppliers performed tests (mark with an 'X' for done or 'G' for generic)															
	Reason for exception of tests:															

Not required.
 Information Note required.
 P PCN required.

A larter or "* inclusion that performance of that disea test should be considered for the appropriate process of copy.

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