

## **Materials Declaration Form**

IPC	1752	Version	2
Form Type *	Distribute	Version	2
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	2020-11-10					
Company Unique ID	NL 008751171B01							
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section					
Contact Phone *	Refer to Supplier Comment section Contact Email *		Refer to Supplier Comment section					
Authorized Representative *	giovanni giacopello Representative Title		ADG MD CHAMPION					
Representative Phone *	Refer to Supplier Comment section	fer to Supplier Comment section Representative Email * Refer to Su						
ISupplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.htr	ml						

**Uncertainty Statement** 

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as omprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product									
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date					
T2650-6PF	EHLZ*W1G266B	А	994X	2020-11-10					
	Amount	UoM	Unit type	ST ECOPACK Grade					
	5200	mg	Each	ECOPACK 2					
	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and witho Antimony oxide flame retardant ( in each organic material)								

Manufacturing information							
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles					
Not Applicable	Not Applicable	3					
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented			
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00675214	me.adgmemed			

Package Designator Size		Nbr of instances	Shape	
SIP	15.50,14.50,5.70	3	Through-hole	
Comment	TO-3PF/ISOWATT 218			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated Directive 2015/863-March 2015							
	Query	Response					
1 - Product(s) meets EU RoHS requirement v	FALSE						
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply) FALSE							
3 - Product(s) meets EU RoHS requirements	3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s) TRUE						
4 - Product(s) does not meet EU RoHS requi	FALSE						
Exemption Id. Description							
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)						

QueryList : ELV directive : 2000/53/EC amended 2020/363_ March 2020						
Query Response						
1 - Product(s) meets EU ELV requirements v	FALSE					
2 - Product(s) meets EU RoHS requirements	TRUE					
Exemption Id.	Exemption Id. Description					
8e	8e Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)					

QueryList : California Prop65 list, dated 3rd January 2020						
Query	Response					
1 - The product does not contain identified substance from California Prop 65 List, no exposure to	FALSE					
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to cons	TRUE					
Substance	ppm in product					
Nickel	6.25 die - leadframe		1201			
Lead	7.59	soft solder	1460			
Lead-Borate Glass	2.41 die		463			

Query							
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH							
CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application							
1000 ppm7.59Soft solder		Soft solder	1460				
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH							
e CategoryLevel_Threshold Amount in Embedded Article / Application - Article / Homogeneous Material (mg) Material		ous ppm in Article /Homogeneou Material					
1000 ppm 7.593 Soft solder		954974					
	Ostances Of Very High Concern above the limits per the of CategoryLevel_Threshold 1000 ppm Substances Of Very High Concern in any Embedded CategoryLevel_Threshold	Destances Of Very High Concern above the limits per the definition within REACH   CategoryLevel_Threshold amount in product (mg)   1000 ppm 7.59   Substances Of Very High Concern in any Embedded article nor Homogeneous Material abort   CategoryLevel_Threshold Amount in Embedded Article / Homogeneous Material (mg)	Destances Of Very High Concern above the limits per the definition within REACH   CategoryLevel_Threshold amount in product (mg) Application   1000 ppm 7.59 Soft solder   Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within   CategoryLevel_Threshold Amount in Embedded Article / Homogeneous Material (mg) Application - Article / Homogeneous Material (mg)				

Responsible metals sourcing					
Query		Response			
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.		true			
The following metals are present is the component : Gold, Tin		īn,			
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .					

Material Composition Declara note : Substance present with	ation : less 0.001mg will not be declared in this docume	nt				Mfr Item Name	E	HLZ*W1G266B				
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	15.033	mg	supplier	die	Silicon(Si)	7440-21-3		11.796	mg	784674	2270
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.475	mg	31597	91
				supplier	metallisation	Gold(Au)	7440-57-5		0.070	mg	4656	13
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.178	mg	11841	34
				supplier	passivation	Silicon oxide	7631-86-9		0.109	mg	7251	21
				JIG-R & California 65	glass	Lead-BorateGlass	65997-18-4	7c-I-Electrical and electronic	2.405	mg	159981	463
Leadframe	M-004 Copper and its alloys	3033.600	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		3023.589	mg	996700	581459
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		6.067	mg	2000	1167
				supplier	alloy & coating	Iron(Fe)	7439-89-6		3.034	mg	1000	583
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.910	mg	300	175
Soft solder	Solder	7.951	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	7.593	mg	954975	1460
				supplier	solder	Silver(Ag)	7440-22-4		0.199	mg	25028	38
				supplier	solder	Tin(Sn)	7440-31-5		0.159	mg	19997	31
Bonding wires	M-003 Aluminum and its alloys	6.180	mg	supplier	wire	Aluminium (Al)	7429-90-5		6.180	mg	1000000	1188
Bonding wires 2	M-003 Aluminum and its alloys	6.003	mg	supplier	wire	Aluminium (Al)	7429-90-5		6.003	mg	1000000	1154
Encapsulation	M-011 Other inorganic materials	2092.333	mg	supplier	mold compound	Quartz	14808-60-7		1788.944	mg	855000	344028
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		188.310	mg	90000	36213
				supplier	mold compound	Phenol resin	9003-35-4		104.617	mg	50000	20119
				supplier	mold compound	Carbon black	1333-86-4		10.462	mg	5000	2012
connections coating	Solder	38.900	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		38.900	mg	1000000	7481