



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-06-22
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 *	Antonella Lanzafame	Representative Title	AMG MD CHAMPION
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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 comprehensive 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
L6225PD	A977*UR29AD6	A	MU1A	2017-06-22
Amount	UoM	Unit type	ST ECOPACK Grade	
1911	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	15.9x11x3.3	20	Flat	
Comment	PowerSO 20 .43 SLUG DOWN			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
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 by application of the selected exemption(s)	FALSE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	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 2016/774 _May 2016	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 27th January 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.06	back side metallization	32
Lead	4.12	soft solder	2153

QueryList :Customer	
Query	Response

QueryList : REACH-12th January 2017				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	A977*UR29AD6				5999998.0	999998.0
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	12.707	mg	supplier	die	Silicon (Si)	7440-21-3		12.228	mg	962304	6399
				supplier	metallization	Aluminium (Al)	7429-90-5		0.093	mg	7319	49
				supplier	metallization	Copper (Cu)	7440-50-8		0.002	mg	157	1
				supplier	metallization	Titanium (Ti)	7440-32-6		0.010	mg	787	5
				supplier	Passivation	Silicon Nitride	12033-89-5		0.027	mg	2125	14
				supplier	Passivation	Silicon Oxide	7631-86-9		0.159	mg	12513	83
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	551	4
				supplier	back side metallization	Gold (Au)	7440-57-5		0.019	mg	1495	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.062	mg	4879	32
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.100	mg	7870	52
Leadframe		827.658	mg	frame alloy	frame alloy	Copper (Cu)	7440-50-8		822.621	mg	993914	430466
				frame alloy	frame alloy	Iron (Fe)	7439-89-6		0.823	mg	994	431
				frame alloy	frame alloy	Iron Phosphide (FeP)	26508-33-8		0.247	mg	298	129
				frame coating	frame coating	Silver (Ag)	7440-22-4		3.967	mg	4793	2076
Die Attach		4.221	mg	soft solder	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.115	mg	974887	2153
				soft solder	soft solder	Silver (Ag)	7440-22-4		0.064	mg	15162	33
				soft solder	soft solder	Tin (Sn)	7440-31-5		0.042	mg	9950	22
Bonding wire		1.756	mg	Bonding wire	Bonding wire	Copper (Cu)	7440-50-8		1.756	mg	1000000	919
Encapsulation		1058.461	mg	Moulding Compound	Moulding Compound	Phenol Resin	205830-20-2		42.339	mg	40001	22155
				Moulding Compound	Moulding Compound	Biphenyl epoxy resin	85954-11-6		31.754	mg	30000	16616
				Moulding Compound	Moulding Compound	epoxy resin	Proprietary		31.754	mg	30000	16616
				Moulding Compound	Moulding Compound	carbon black	1333-86-4		2.117	mg	2000	1108
				Moulding Compound	Moulding Compound	Silica, vitreous	60676-86-0		950.497	mg	897999	497382
Finishing		6.197	mg	connection coating	connection coating	Tin (Sn)	7440-31-5		6.197	mg	1000000	3243