



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-03-08
Company Unique ID	NL 008751171801		
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 Giacobello	Representative Title	ADG 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
STPS1L60ZFY	BA7Z*Z24QD5U	A	Z6IA	2018-03-08
Amount	UoM	Unit type	ST ECOPACK Grade	
12.5	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
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	3.6 - 1.6 - 0.98	2	flat	
Comment	Package: SOD123-FLAT NEP			

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 : California Prop65 list, dated 15th December 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.01	Die	560
Lead	0.63	Soft solder	50240

QueryList : REACH-15th January 2018				
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	BA7Z*Z24QD5U				5000000.0	1000000.0
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	0.478	mg	supplier	die	Silicon (Si)	7440-21-3		0.457	mg	956067	36560
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	8369	320
				supplier	metallization	Gold (Au)	7440-57-5		0.003	mg	6276	240
				supplier	passivation	Nickel (Ni)	7440-02-0		0.003	mg	6276	240
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	2092	80
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	2092	80
				supplier	Passivation	Silicon Oxide	7631-86-9		0.004	mg	8368	320
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	2092	80
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.004	mg	8368	320
				Leadframe & clip	M-004 Copper and its alloys	6.241	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.006	mg	962	480
supplier	alloy	Phosphorus (P)	12185-10-3						0.002	mg	320	160
supplier	solder	Lead (Pb)	7439-92-1					7a-Lead in high me	0.628	mg	950076	50240
Soft solder	Solder	0.661	mg	supplier	solder	Tin (Sn)	7440-31-5		0.033	mg	49924	2640
				supplier	mold compound	Fused, Silica	60676-86-0		3.161	mg	638199	252880
				supplier	mold compound	Aluminum hydroxide	21645-51-2		0.526	mg	106198	42080
				supplier	mold compound	Epoxy resin	29690-82-2		0.826	mg	166768	66080
				supplier	mold compound	Phenol resin	9003-35-4		0.425	mg	85807	34000
connections coating	Solder	0.167	mg	supplier	mold compound	Carbon black	1333-86-4		0.015	mg	3028	1200
				supplier	solder alloy	Tin (Sn)	7440-31-5		0.167	mg	1000000	13360