



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 *	2017-11-30
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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

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
	7BD1*168LAS1	A	3068	2017-11-30
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-10.5-1.27	3	gull wing	
Comment	Package: D2PAK CLIP. MDF valid for CPs: T1620T-8G-TR and T1620T-8G			

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	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 by application of the selected exemption(s)	TRUE
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)
7c-I	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound

Query : 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			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	0.18	Die	130
Lead	6.28	Soft Solder	4553
Lead-Borate Glass	0.58	Die	420

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 :						Mfr Item Name	7BD1*168LAS1					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	7.501	mg	supplier	die	Silicon (Si)	7440-21-3		6.617	mg	882149	4795
				supplier	metallization	Gold (Au)	7440-57-5		0.025	mg	3333	18
				supplier	Passivation	Silicon Oxide	7631-86-9		0.038	mg	5066	28
				supplier	back side metallization	Gold (Au)	7440-57-5		0.008	mg	1066	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.180	mg	23997	130
				supplier	glass coating	Glass : Aluminium Oxide (Al2O3)	1344-28-1		0.053	mg	7066	38
Leadframe	Copper & its alloys	900.739	mg	JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.580	mg	77323	420
				supplier	alloy	Copper (Cu)	7440-50-8		899.838	mg	999000	652057
Soft solder	Solder	6.827	mg	supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.901	mg	1000	653
				JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.283	mg	920316	4553
				supplier	solder	Silver (Ag)	7440-22-4		0.170	mg	24901	123
				supplier	solder	Tin (Sn)	7440-31-5		0.340	mg	49802	246
				supplier	solder	flux residue	Proprietary		0.034	mg	4981	26
Encapsulation	Other Organic Materials	426.994	mg	supplier	mold compound	Silica, vitreous	60676-86-0		324.515	mg	759999	235156
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		43.553	mg	101999	31560
				supplier	mold compound	Phenol resin	9003-35-4		25.620	mg	60001	18565
				supplier	mold compound	Others	Proprietary		21.350	mg	50001	15471
				supplier	mold compound	Metal hydroxide	21645-51-2		8.540	mg	20000	6188
				supplier	mold compound	Carbon black	1333-86-4		3.416	mg	8000	2475
Connections coating	Solder	6.314	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.314	mg	1000000	4575
Clip	Copper & its alloys	31.625	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.625	mg	1000000	22917