



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 *	2017-05-23
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giuseppe Vitali Palma	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 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
TN2540-12G-TR	7AD1*25CTNL1	A	3068	2017-05-23
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	 life.augmented	
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	D2PAK CLIP			

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-1	Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectric 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	0.30	Die back side metal	215
Lead	10.34	Soft solder	7490
Lead-Borate Glass	0.96	Die glass coating	693

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	7AD1*25CTNL1					
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	16.026	mg	supplier	die	Silicon (Si)	7440-21-3		14.566	mg	908898	10555
				supplier	metallization	Gold (Au)	7440-57-5		0.042	mg	2621	30
				supplier	Passivation	Silicon Oxide	7631-86-9		0.062	mg	3869	45
				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	874	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.297	mg	18532	215
				supplier	glass coating	Glass : Aluminium Oxide (Al2O3)	1344-28-1		0.088	mg	5491	64
				JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.957	mg	59715	693
				supplier	alloy	Copper (Cu)	7440-50-8		899.839	mg	999000	652057
Leadframe	Copper & its alloys	900.740	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 met	10.336	mg	920310	7490
				supplier	solder	Silver (Ag)	7440-22-4		0.280	mg	24931	203
				supplier	solder	Tin (Sn)	7440-31-5		0.559	mg	49773	405
				supplier	solder	Flux residue	Proprietary		0.056	mg	4986	41
Encapsulation	Other Organic Materials	414.064	mg	supplier	mold compound	Silica, vitreous	60676-86-0		314.689	mg	759999	228036
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		42.235	mg	102002	30604
				supplier	mold compound	Phenol resin	9003-35-4		24.844	mg	60000	18003
				supplier	mold compound	Others	Proprietary		20.703	mg	49999	15002
				supplier	mold compound	Metal hydroxide	21645-51-2		8.281	mg	19999	6001
				supplier	mold compound	Carbon black	1333-86-4		3.313	mg	8001	2401
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.314	mg	1000000	4575
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