



## Materials Declaration Form

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

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-12-22
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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 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
T1050-8G	7BD1*108VBC1	A	SHENZHEN B/E	2016-12-22
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
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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 T1050-8G-TR			
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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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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

QueryList : REACH-20th June 2016				
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*108VBC1					
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	7.242	mg	supplier	die	Silicon (Si)	7440-21-3		6.276	mg	866611	4548
				supplier	metallization	Nickel (Ni)	7440-02-0		0.126	mg	17399	91
				supplier	metallization	Gold (Au)	7440-57-5		0.024	mg	3314	17
				supplier	Passivation	Silicon Oxide	7631-86-9		0.036	mg	4971	26
				supplier	back side metallization	Gold (Au)	7440-57-5		0.008	mg	1105	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.171	mg	23612	124
				supplier	glass coating	Glass : Aluminium Oxide	1344-28-1		0.051	mg	7042	37
				JIG - R	glass coating	Lead-Borate Glass	65997-18-4	7c-I-Electrical and e	0.550	mg	75946	399
				Leadframe	Copper & its alloys	900.742	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	CopperPhosphorous (CuP)	12517-41-8						0.901	mg	1000	653
Soft solder	Solder	6.811	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	6.300	mg	924974	4565
				supplier	solder	Silver (Ag)	7440-22-4		0.341	mg	50066	247
				supplier	solder	Tin (Sn)	7440-31-5		0.170	mg	24960	123
				supplier	solder	Silver (Ag)	7440-22-4		0.341	mg	50066	247
Encapsulation	Other Organic Materials	427.266	mg	supplier	mold compound	Silica, vitreous	60676-86-0		324.723	mg	760002	235307
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		43.581	mg	102000	31580
				supplier	mold compound	Phenol resin	9003-35-4		25.636	mg	60000	18577
				supplier	mold compound	Others	Proprietary		21.363	mg	49999	15480
				supplier	mold compound	Metal hydroxide	Proprietary		8.545	mg	19999	6192
				supplier	mold compound	Carbon black	1333-86-4		3.418	mg	8000	2477
Connections coating	Solder	6.314	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.314	mg	1000000	4575
Clip		31.625	mg	supplier	alloy	Copper ( Cu)	7440-50-8		31.625	mg	1000000	22917