



## 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

*\* : Required Field*


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-08-05
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<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
<b>Legal Statement</b>	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STH150N10F7-2	R1(9*OD0HR52	A	SHENZHEN B/E	2016-08-05
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380.00	mg	Each	ECOPACK1

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	10.2-7.2-4.5	3	GULL WING	
Comment	H2PAK HC 2-3 Leads			

QueryList : ROHS directive 2011/65/EU _ July 2011	
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)

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	R1(9*ODD)HS2					
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	9.272	mg	supplier	die	Silicon (Si)	7440-21-3		8.881	mg	957835	6436
				supplier	metallization	Aluminium (Al)	7429-90-5		0.116	mg	12509	84
				supplier	metallization	Titanium (Ti)	7440-32-6		0.023	mg	2480	17
				supplier	Passivation	Silicon Oxide	7631-86-9		0.132	mg	14235	96
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.007	mg	755	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.089	mg	9598	64
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.004	mg	431	3
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.020	mg	2157	14
				Leadframe	Copper & its alloys	850.601	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	CopperPhosphorous (CuP)	12517-41-8						1.696	mg	1994	1229
supplier	alloy	Cobalt (Co)	7440-48-4						2.374	mg	2791	1720
supplier	metallization	Nickel (Ni)	7440-02-0						2.804	mg	3296	2032
supplier	metallization	Phosphorus (P)	12185-10-3						0.017	mg	20	12
supplier	metallization	Phosphorus (P)	12185-10-3						0.017	mg	20	12
Soft solder	Solder	11.421	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	10.907	mg	954995	7904
				supplier	solder	Silver (Ag)	7440-22-4		0.286	mg	25042	207
				supplier	solder	Tin (Sn)	7440-31-5		0.228	mg	19963	163
Bonding wires	Other inorganic materials	0.154	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.153	mg	994798	111
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	5202	1
Bonding Ribbons	Other Nonferrous metals & alloys	9.295	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		9.295	mg	1000000	6736
Encapsulation	Other Organic Materials	495.523	mg	supplier	mold compound	Silica, vitreous	60676-86-0		399.391	mg	805999	289414
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		34.687	mg	70001	25136
				supplier	mold compound	Phenol resin	9003-35-4		19.821	mg	40000	14363
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		29.731	mg	59999	21544
				supplier	mold compound	Antimony Trioxide	1309-64-4		5.946	mg	11999	4309
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.469	mg	7001	2514
				supplier	mold compound	Carbon black	1333-86-4		2.478	mg	5001	1796
Connections coating	Solder	3.734	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.734	mg	1000000	2706