



## 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>	2016-09-19
<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
<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
STTH208	HNRH*F38R81E	A	ZA41	2016-09-19
	Amount	UoM	Unit type	ST ECOPACK Grade
	400.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
Not Applicable	Not Applicable	Not Applicable		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
RAD	6.4 - 10.17 - 3.24	2	Through-hole	
Comment	Package: DO 15			

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	HNRH*F38R81E					
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	1.911	mg	supplier	die	Silicon (Si)	7440-21-3		1.670	mg	873888	4175
				supplier	metallization	Aluminium (Al)	7429-90-5		0.192	mg	100471	480
				supplier	Passivation	Silicon Oxide	7631-86-9		0.016	mg	8373	40
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	523	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1047	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.011	mg	5756	28
				supplier	polymer die coating	Problimide	proprietary		0.019	mg	9942	48
				supplier	alloy	Copper (Cu)	7440-50-8		286.173	mg	999528	715433
Leadframe	Copper & its alloys	286.308	mg	supplier	alloy	Zinc (Zn)	7440-66-6		0.011	mg	38	28
				supplier	alloy	Iron (Fe)	7439-89-6		0.028	mg	98	70
				supplier	alloy	Phosphorus (P)	12185-10-3		0.096	mg	335	240
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high me	4.429	mg	924828	11073
Soft solder	Solder	4.789	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.240	mg	50115	600
				supplier	solder	Tin (Sn)	7440-31-5		0.120	mg	25057	300
				supplier	solder	Quartz	14808-60-7		80.341	mg	780002	200853
Encapsulation	Other Organic Materials	103.001	mg	supplier	mold compound	epoxy resin	29690-82-2		14.935	mg	144999	37338
				supplier	mold compound	phenol resin	9003-35-4		7.210	mg	69999	18025
				supplier	mold compound	Carbon Black	1333-86-4		0.515	mg	5000	1288
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.991	mg	1000000	9978
Connections coating	Solder	3.991	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.991	mg	1000000	9978