



## 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>			


Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-12-10
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD 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
STPS2150	HNRH*Z68P81R	A	ZA41	2015-12-10
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	
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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-15th June 2015				
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*Z68P81R									
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	1.231	mg	supplier	die	Silicon (Si)	7440-21-3		1.171	mg	951259	2928				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.007	mg	5686	18				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	812	3				
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	1625	5				
				supplier	metallization	Nickel (Ni)	7440-02-0		0.005	mg	4062	13				
				supplier	metallization	Gold (Au)	7440-57-5		0.005	mg	4062	13				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	5686	18				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	812	3				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.002	mg	1625	5				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.008	mg	6499	20				
				supplier	polymer die coating	Durimide	proprietary		0.022	mg	17872	55				
				Leadframe	Copper & its alloys	286.797	mg	supplier	alloy	Copper (Cu)	7440-50-8		286.662	mg	999529	716655
								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				
Soft solder	Solder	4.797	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.437	mg	924953	11093				
				supplier	solder	Silver (Ag)	7440-22-4		0.240	mg	50031	600				
				supplier	solder	Tin (Sn)	7440-31-5		0.120	mg	25016	300				
Encapsulation		103.177	mg	supplier	mold compound	Quartz	14808-60-7		80.478	mg	779999	201195				
				supplier	mold compound	epoxy resin	29690-82-2		14.961	mg	145003	37403				
				supplier	mold compound	phenol resin	9003-35-4		7.222	mg	69996	18055				
				supplier	mold compound	Carbon Black	1333-86-4		0.516	mg	5001	1290				
Connections coating	Solder	3.998	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.998	mg	1000000	9995				