



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 *	2016-08-26
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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	<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
TPA220	8HRH*CWB220M	A	ZA41	2016-08-26
	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	
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-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	8HRH*CWB220M					
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	1.831	mg	supplier	die	Silicon (Si)	7440-21-3		1.789	mg	977062	4473
				supplier	Front and back side metallization	Aluminium (Al)	7429-90-5		0.014	mg	7646	35
				supplier	Front and back side metallization	Gold (Au)	7440-57-5		0.005	mg	2731	13
				supplier	Front and back side metallization	Nickel (Ni)	7440-02-0		0.023	mg	12561	58
Leadframe	Copper & its alloys	286.366	mg	supplier	alloy	Copper (Cu)	7440-50-8		286.231	mg	999529	715578
				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	4.790	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.430	mg	924843	11075
				supplier	solder	Silver (Ag)	7440-22-4		0.240	mg	50104	600
				supplier	solder	Tin (Sn)	7440-31-5		0.120	mg	25052	300
Encapsulation	Other inorganic materials	103.021	mg	supplier	mold compound	Quartz	14808-60-7		80.355	mg	779987	200888
				supplier	mold compound	epoxy resin	29690-82-2		14.939	mg	145009	37348
				supplier	mold compound	phenol resin	9003-35-4		7.212	mg	70005	18030
				supplier	mold compound	Carbon Black	1333-86-4		0.515	mg	4999	1288
Connections coating	Solder	3.992	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.992	mg	1000000	9980