



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 *	2016-05-03
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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
1.5KE440CA	H2WA*TWB221K	A	ZA41	2016-05-03
Amount		UoM	Unit type	ST ECOPACK Grade
877.00		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	
SMC	9.15X15.7X5	N/A	J bend	
Comment	Package: DO201			

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-17th December 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	H2WA*TWB221K					
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	11.019	mg	supplier	die	Silicon (Si)	7440-21-3		9.818	mg	891006	11195
				supplier	metallization	Aluminium (Al)	7429-90-5		1.054	mg	95653	1202
				supplier	Passivation	Silicon Oxide	7631-86-9		0.090	mg	8168	103
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.019	mg	1724	22
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	635	8
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.031	mg	2813	35
Leadframe	Copper & its alloys	704.212	mg	supplier	Frame Alloy	Copper (Cu)	7440-50-8		703.865	mg	999507	802583
				supplier	Frame Alloy	Zinc (Zn)	7440-66-6		0.030	mg	43	34
				supplier	Frame Alloy	Iron (Fe)	7439-89-6		0.078	mg	111	89
				supplier	Frame Alloy	Phosphorus (P)	12185-10-3		0.239	mg	339	273
				supplier	soft solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.094	mg	924912	2388
Die attach	Other Organic Materials	2.264	mg	supplier	soft solder	Tin(Sn)	7440-31-5		0.113	mg	49912	129
				supplier	soft solder	Silver (Ag)	7440-22-4		0.057	mg	25177	65
				supplier	Moulding Compound	Silica fused(SiO2)	7631-86-9		59.035	mg	399996	67315
Encapsulation	Other inorganic materials	147.589	mg	supplier	Moulding Compound	silica quartz	14808-60-7		84.865	mg	575009	96767
				supplier	Moulding Compound	phenolic resin	9003-35-4		2.951	mg	19995	3365
				supplier	Moulding Compound	carbon black	1333-86-4		0.738	mg	5000	842
				supplier	Connection Coating	Tin(Sn)	7440-31-5		11.916	mg	1000000	13587
Finishing	Solder	11.916	mg	supplier	Connection Coating	Tin(Sn)	7440-31-5		11.916	mg	1000000	13587