



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	03/10/2015
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giuseppe Vitali Palma	Representative Title	Group 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
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Legal Statement

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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
	8HSR*TWU033C	A	ZA41	03/10/2015
Amount	UoM	Unit type	ST ECOPACK Grade	
70.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMC	4.3X2.77X2	NA	J bend	
Comment	Package: SMA; MD valid for SMAJ28A-TR			

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)

ELV exemption number	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	false
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Exemption Id.	Description
	#N/A
	#N/A

QueryList : REACH-17th December 2014				
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	8HSR*TWU033C					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic material	1.136	mg	Supplier	Silicon Die	silicon	7440-21-3		1.092	mg	961268	15600
				supplier	metallization	Aluminium (Al)	7429-90-5		0.020	mg	17606	286
				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.005	mg	4401	71
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.007	mg	6162	100
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.004	mg	3521	57
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	880	14
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.007	mg	6162	100
Die attach	Other organic material	2.850	mg	Supplier	soft solder	Ag	7440-22-4		0.071	mg	24912	1014
				Supplier	soft solder	Sn	7440-31-5		0.143	mg	50175	2043
				JIG R	soft solder	Pb	7439-92-1	7a-Lead in high me	2.636	mg	924912	37657
Leadframe	Copper and its alloy	26.856	mg	Supplier	Alloy	Cu	7440-50-8		26.843	mg	999516	383471
				Supplier	Alloy	Zn	7440-66-6		0.001	mg	37	14
				Supplier	Alloy	Fe	7439-89-6		0.003	mg	112	43
				Supplier	Alloy	Iron Phoesphide (Fe2P)	1310-43-6		0.009	mg	335	129
Encapsulation	Other organic material	38.517	mg	Supplier	Molding Compound	silica fused	7631-86-9		26.461	mg	686995	378014
				Supplier	Molding Compound	silica quartz	14808-60-7		9.629	mg	249994	137557
				Supplier	Molding Compound	phenolic resin	9003-35-4		2.311	mg	59999	33014
				Supplier	Molding Compound	carbon black	1333-86-4		0.116	mg	3012	1657
Finishing	Other inorganic material	0.641	mg	Supplier	connection coating	Sn	7440-31-5		0.641	mg	1000000	9157