



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 *	2015-06-25
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 *	Giovanni Giacobello	Representative Title	IPD Materials Declaration 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/internet/com/support/online_tech_support.jsp		

Uncertainty Statement


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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

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
	8HVV*TWU027N	A	ZA41	2015-06-25
Amount	UoM	Unit type	ST ECOPACK Grade	
2050.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used c	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
NAC	8,6,25,4,1,2	2	NAC	
Comment	Package: R6; MDF valid for BZW50-22; LDP24A; LDP24ARL			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
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 2014				
Query				Response
The product 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		SHVV*TWU027N					
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 materials	22.534	mg	supplier	die	Silicon (Si)	7440-21-3		21.742	mg	964853	10606	
Silicon die				supplier	metallization	Aluminium (Al)	7429-90-5		0.252	mg	11183	123	
Silicon die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.288	mg	12781	140	
Silicon die				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.084	mg	3728	41	
Silicon die				supplier	back side metallization	Gold (Au)	7440-57-5		0.03	mg	1331	15	
Silicon die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.138	mg	6124	67	
Leadframe	Copper & its alloys	1092.952	mg	supplier	Frame Alloy	Copper (Cu)	7440-50-8		1092.405	mg	999500	532880	
Leadframe				supplier	Frame Alloy	Zinc (Zn)	7440-66-6		0.044	mg	40	21	
Leadframe				supplier	Frame Alloy	Iron (Fe)	7439-89-6		0.109	mg	100	53	
Leadframe				supplier	Frame Alloy	Phosphorus (P)	12185-10-3		0.394	mg	360	192	
Soft solder	Solder	9.407	mg	supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	8.701	mg	924950	4244	
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.471	mg	50069	230	
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.235	mg	24981	115	
Encapsulation	Other inorganic materials	904.115	mg	supplier	Moulding Compound	Silica fused(SiO2)	7631-86-9		361.649	mg	400003	176414	
Encapsulation				supplier	Moulding Compound	silica quartz	14808-60-7		519.866	mg	575000	253593	
Encapsulation				supplier	Moulding Compound	phenolic resin	9003-35-4		18.082	mg	20000	8820	
Encapsulation				supplier	Moulding Compound	carbon black	1333-86-4		4.518	mg	4997	2204	
connections coating	Solder	20.992	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		20.992	mg	1000000	10240	