



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 *	2013-07-02
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 (CSD 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
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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
	H8DZ*F57P02V	A	Z45A	2013-07-02
Amount	UoM	Unit type	ST ECOPACK Grade	
1950.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used	bright, annealed Tin/Silver/Bismuth	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
THO	10X9.1X4.5	2	gull wing	
Comment				

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-19 December 2012				
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	H8D2*F57P02V						
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	6.596	mg		Silicon Die	Silicon (Si)	7440-21-3		6.345	mg	961947	3254	
					Wafer back side metal	Gold (Au)	7440-57-5		0.009	mg	1364	5	
					Wafer front side metal	Aluminium(Al)	7429-90-5		0.211	mg	31989	108	
						Nickel (Ni)	7440-02-0		0.003	mg	455	2	
						Titanium (Ti)	7440-32-6		0.028	mg	4245	14	
Leadframe	Copper & its alloys	1267.123	mg		Alloy	Copper (Cu)	7440-50-8		1261.234	mg	995352	646787	
						Iron (Fe)	7439-89-6		1.253	mg	989	643	
						Iron Phosphide (FeP)	26508-33-8		0.376	mg	297	193	
						Coating	Nickel (Ni)	7440-02-0		3.977	mg	3139	2039
						Phosphorus (P)	12185-10-3		0.283	mg	223	145	
Die Attach	Other Organic Materials	0.853	mg		Solder Wire	Silver (Ag)	7440-22-4		0.021	mg	24619	11	
					Solder Wire	Tin (Sn)	7440-31-5		0.016	mg	18757	8	
					JIG R	Lead/Lead Compounds	Lead	7439-92-1	7a-Lead in high me	0.816	mg	956624	418
Bonding Wire	Other inorganic materials	0.57	mg		Bonding Wire	Aluminum (Al)	7429-90-5		0.57	mg	1000000	292	
Encapsulation	Other Organic Materials	674.478	mg		Moulding Compound	Silica	60676-86-0		487.975	mg	723485	250244	
						Epoxy Resin	proprietary		109.095	mg	161747	55946	
						Phenolic Resin	9003-35-4		59.142	mg	87686	30329	
						Hydroxide Metal	proprietary		9.133	mg	13541	4684	
						Carbon Black	proprietary		9.133	mg	13541	4684	
Finishing	Other inorganic materials	0.38	mg		Connection Coating	Tin (Sn)	7440-31-5		0.38	mg	1000000	195	