



## Materials Declaration Form

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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	03/19/2015
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Giuseppe Vitali Palma	<b>Representative Title</b>	AMS & IPD Materials Declaration Champion
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
	CCDZ*VJL0B52	A	SH1A	03/19/2015
Amount	UoM	Unit type	ST ECOPACK Grade	
1900.00	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		
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10X9.1X4.5	2	Through-hole	
Comment	Package: TO 220 AB NON ISOL; MD valid for STP2N95K5			

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	CCD2*VJL0B52					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	2.582	mg	supplier	die	Silicon (Si)	7440-21-3		2.492	mg	965143	1312
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.035	mg	13555	18
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.012	mg	4648	6
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.019	mg	7359	10
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	387	1
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.017	mg	6584	9
die (s)				supplier	back side metallization	Silver (Ag)	7440-22-4		0.006	mg	2324	3
Leadframe	Copper & its alloys	1154.766	mg	supplier	alloy	Copper (Cu)	7440-50-8		1153.265	mg	998700	606982
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.531	mg	460	279
Leadframe				supplier	alloy	Iron Phosphide (Fe2P)	1310-43-6		0.97	mg	840	511
Soft solder	Other Organic Materials	2.328	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.223	mg	954897	1170
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.058	mg	24914	31
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.047	mg	20189	25
Bonding wire		0.134	mg	supplier	wire	Copper (Cu)	7440-50-8		0.134	mg	1000000	71
encapsulation	Other Organic Materials	735.949	mg	supplier	mold compound	Silica, vitreous	60676-86-0		640.275	mg	869999	336987
encapsulation				supplier	mold compound	Epoxy resin	Proprietary		73.595	mg	100000	38734
encapsulation				supplier	mold compound	Phenol resin	Proprietary		18.399	mg	25000	9684
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		3.68	mg	5000	1937
connections coating	Solder	4.241	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.241	mg	1000000	2232