




## Materials Declaration Form

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

Supplier Information			
<b>Company Name *</b>	<b>STMicroelectronics</b>	<b>Response Date *</b>	<b>2014-03-05</b>
<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>	<b>Giuseppe Vitali Palma</b>	<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>	<b>true</b>
<b>Legal Declaration *</b>	<b>Standard</b>
<b>Legal Statement</b>	<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
	PDQ7*UF64JC4	A	BO2A	2014-03-05
Amount	UoM	Unit type	ST ECOPACK Grade	
150.00	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	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3,9,9,9,1.25	16	gull wing	
Comment	Package: SO 16 .15 TO JEDEC MS-012; MD valid also for ST3232EBDR, ST3232ECDR, ST3232CDR.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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)	false
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

QueryList : REACH-16th December 2013				
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	PDQ7*UF64JC4					
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	3.989	mg	supplier	die	Silicon (Si)	7440-21-3		3.89	mg	975182	25933
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	8022	213
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.012	mg	3008	80
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.055	mg	13788	367
Leadframe	Copper & its alloys	33.275	mg	supplier	alloy	Copper (Cu)	7440-50-8		31.08	mg	934035	207200
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.731	mg	21968	4873
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.044	mg	1322	293
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.038	mg	1142	253
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.382	mg	41533	9213
Soft solder	Solder	1.189	mg	supplier	solder	Silver (Ag)	7440-22-4		1.082	mg	910008	7213
Soft solder				supplier	solder	acrylate	Proprietary		0.059	mg	49622	393
Soft solder				supplier	solder	Methacrylate	Proprietary		0.048	mg	40370	320
Bonding wire	Other inorganic materials	0.109	mg	supplier	wire	Copper (Cu)	7440-50-8		0.109	mg	1000000	727
encapsulation	Other Organic Materials	110.791	mg	supplier	mold compound	Silica, vitreous	60676-86-0		97.162	mg	876985	647747
encapsulation				supplier	mold compound	Epoxy resin A	EC 413-900-7		4.432	mg	40003	29547
encapsulation				supplier	mold compound	Epoxy resin B	29690-82-2		4.432	mg	40003	29547
encapsulation				supplier	mold compound	phenol resin	Proprietary		3.324	mg	30002	22160
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.333	mg	3006	2220
encapsulation				supplier	mold compound	additive	Proprietary		1.108	mg	10001	7387
connections coating	Solder	0.647	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.647	mg	1000000	4313