



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 *	12/09/2014
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	AMS & 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
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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
	9F8W*VNA4X3B	A	Z8GA	12/09/2014
Amount	UoM	Unit type	ST ECOPACK Grade	
482.000	mg	Each	ECOPACK® 1	

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 o	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DIP	9.05X6.4X3.32	4	Through-hole	
Comment	Package: PDIP 08 .3 CU .25 Au W.; MD valid for VIPER12ADIP-E			

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 June 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	9F8W*VNA4X3B					
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	3.868	mg	Supplier	Silicon die	Silicon	7440-21-3		3.781	mg	977508	7844
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.027	mg	6980	56
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.026	mg	6722	54
Silicon Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	517	4
Silicon Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.006	mg	1551	12
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.026	mg	6722	54
Leadframe	Copper and its alloy	185.409	mg	Supplier	Alloy	Copper(CU)	7440-50-8		180.007	mg	970864	373459
Leadframe				Supplier	Alloy	Fe	7439-89-6		3.864	mg	20840	8017
Leadframe				Supplier	Alloy	P	7723-14-0		0.028	mg	151	58
Leadframe				Supplier	Alloy	Zn	7740-66-6		0.092	mg	496	191
Leadframe				Supplier	Alloy	Pb	7439-92-1		0.009	mg	49	19
Leadframe				Supplier	Alloy	Silver(Ag)	7440-22-4		1.409	mg	7599	2923
Die Attach	Other Organic Material	0.745	mg	Supplier	Epoxy	Silver(Ag)	7440-22-4		0.495	mg	664430	1027
Die Attach				Supplier	Epoxy	Epoxy Resin	Proprietary		0.104	mg	139597	216
Die Attach				Supplier	Epoxy	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0.052	mg	69799	108
Die Attach				Supplier	Epoxy	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.052	mg	69799	108
Die Attach				Supplier	Epoxy	Epoxy resin modifier	Proprietary		0.021	mg	28188	44
Die Attach				Supplier	Epoxy	Amine	Proprietary		0.021	mg	28188	44
Bonding wire	Other Inorganic Material	0.204	mg	Supplier	Bonding wire	Gold(Au)	7440-57-5		0.204	mg	1000000	423
Encapsulation	Other Organic Material	288.65	mg	Supplier	Molding compound	Silica, vitreous	60676-86-0		262.714	mg	910147	545050
Encapsulation				Supplier	Molding compound	Epoxy Cresol Novolak	29690-82-2		21.556	mg	74679	44722
Encapsulation				Supplier	Molding compound	Poly Phenyl Glycidyl Ether co-Dicyclopentadiene	119345-05-0		1.437	mg	4978	2981
Encapsulation				JIG I	Molding compound	Brominated epoxy resin	68541-56-0		1.437	mg	4978	2981
Encapsulation				Supplier	Molding compound	Substituted Polydimethylsiloxane	102782-93-4		1.437	mg	4978	2981
Encapsulation				Supplier	Molding compound	Antimony pentaoxide	1314-60-9		0.028	mg	97	58
Encapsulation				Supplier	Molding compound	Carbon Black	1333-86-4		0.041	mg	142	85
Finishing	Other Inorganic Material	3.124	mg	Supplier	Connection Coating	Tin(Sn)	7440-31-5		3.124	mg	1000000	6481