



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 *	2015-05-22
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
	9F17*U370BDZ	A	Z8GA	2015-05-22
Amount	UoM	Unit type	ST ECOPACK Grade	
1025.00	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	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DIP	17X19.18X6.35	15	Through-hole	
Comment	Package: PDIP 16 .3 Cu .25 STD, MD valid for CP:L6598			

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-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	9F17*U370BDZ					
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	5.526	mg	Supplier	Silicon die	Silicon (Si)	7440-21-3		4.783	mg	964509	4666
Silicon Die				Supplier	metallization	Aluminium (Al)	7429-90-5		0.036	mg	7260	35
Silicon Die				Supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	1008	5
Silicon Die				Supplier	metallization	Titanium Nitride (TiN)	25583-20-4		0.001	mg	202	1
Silicon Die				Supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.008	mg	1613	8
Silicon Die				Supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.096	mg	19359	94
Silicon Die				Supplier	back side metallization	Chromium (Cr)	7440-47-3		0.003	mg	605	3
Silicon Die				Supplier	back side metallization	Nickel (Ni)	7440-02-0		0.027	mg	5445	26
Leadframe	Copper and its alloy	570.764	mg	Supplier	Alloy	Iron Phosphide(Fe2P)	1310-43-6		0.485	mg	849	473
Leadframe				Supplier	Alloy	Fe	7439-89-6		13.42	mg	23499	13093
Leadframe				Supplier	Alloy	Cu	7440-50-8		556.407	mg	974303	542836
Leadframe				Supplier	Alloy	Zn	7440-66-6		0.713	mg	1249	696
Leadframe				Supplier	Alloy	Silver(Ag)	7440-22-4		0.057	mg	100	56
Die Attach	Other Organic Material	0.737	mg	Supplier	Epoxy	Silver(Ag)	7440-22-4		0.527	mg	715061	514
Die Attach				Supplier	Epoxy Resin	Epoxy Resin	Proprietary		0.111	mg	150611	108
Die Attach				Supplier	Epoxy	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0.055	mg	74627	54
Die Attach				Supplier	Epoxy	Epoxy resin modifier	Proprietary		0.022	mg	29851	21
Die Attach				Supplier	Epoxy	Amine	Proprietary		0.022	mg	29851	21
Bonding wire	Other Inorganic Material	0.221	mg	Supplier	Bonding wire	Gold(Au)	7440-57-5		0.221	mg	1000000	216
Encapsulation	Other Organic Material	434.871	mg	Supplier	Molding compound	Silica (Amorphous)	50676-86-0		332.832	mg	764932	324714
Encapsulation				Supplier	Molding compound	Epoxy resin	29690-82-2		43.524	mg	100029	42462
Encapsulation				Supplier	Molding compound	Phenol resin	9003-35-4		13.057	mg	30008	12739
Encapsulation				Supplier	Molding compound	Metal Hydroxide	Proprietary		43.524	mg	100029	42462
Encapsulation				Supplier	Molding compound	Carbon black	1333-86-4		2.176	mg	5001	2123
Finishing	Other Inorganic Material	12.881	mg	Supplier	Connection Coating	Tin(Sn)	7440-31-5		12.888	mg	1000000	12574