



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 *	2014-02-10
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 *	Giovanni Giacopello	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

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
	TXDP*MM3EA62	A	LGGA	2014-02-10
Amount	UoM	Unit type	ST ECOPACK Grade	
330.00	mg	Each	ECOPACK® 1	

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 on	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5 - 6.1 - 2.3	3	gull wing	
Comment	Package: TO 252 DPAK; MDF valid for STD10NF30			

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-18 June 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	TXDP*MM3EA62					
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	6.519	mg	supplier	die	Silicon (Si)	7440-21-3		6.257	mg	959810	19553
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.119	mg	18254	372
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.029	mg	4449	91
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.06	mg	9204	188
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	460	9
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.009	mg	1381	28
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.042	mg	6443	131
Leadframe	Copper & its alloys	169.716	mg	supplier	alloy	Copper (Cu)	7440-50-8		168.29	mg	991598	525906
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.169	mg	996	528
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.051	mg	301	159
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7065	3747
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	41	22
Soft solder	Solder	4.802	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.586	mg	955019	14331
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.12	mg	24990	375
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.096	mg	19992	300
Bonding wire	Other inorganic materials	0.256	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.17	mg	664063	531
Bonding wire				supplier	wire	Magnesium (Mg)	7439-95-4		0.086	mg	335938	269
encapsulation	Other Organic Materials	147.662	mg	supplier	mold compound	Silica, vitreous	60676-86-0		118.13	mg	800003	369156
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.337	mg	70004	32303
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		5.906	mg	39997	18456
encapsulation				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		8.859	mg	59995	27684
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		1.772	mg	12000	5538
encapsulation				JIG I	mold compound	Brominated Epoxy Resin	40039-93-8		2.215	mg	15000	6922
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.443	mg	3000	1384
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266