



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-05-26
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD MD 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/web/en/support/support.html		

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
STD64N4F6AG	TLDP*7D43AC2	A	SHENZHEN B/E	2015-05-26
Amount	UoM	Unit type	ST ECOPACK Grade	
350.00	mg	Each	ECOPACK1	

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5, 6.1, 2.3	3	GULL WING	
Comment	Package: TO 252 DPAK, MD valid for CP:STD64N4F6,STD64N4F6AG.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	false
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - 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
1 - Product(s) 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	TLPD*7D43AC2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	1.984	mg	supplier	die	Silicon (Si)	7440-21-3		1.892	mg	953629	5406
				supplier	metallization	Aluminium (Al)	7429-90-5		0.025	mg	12601	71
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	1512	9
				supplier	Passivation	Silicon Nitride	12033-89-5		0.011	mg	5544	31
				supplier	Passivation	Silicon Oxide	7631-86-9		0.028	mg	14113	80
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	504	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.019	mg	9577	54
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	504	3
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.004	mg	2016	11
Leadframe	Copper & its alloys	166.150	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.152	mg	987975	469006
				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.330	mg	1986	943
				supplier	alloy	Cobalt (Co)	7440-48-4		0.462	mg	2781	1320
				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7216	3426
				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	20
Soft solder	Solder	2.613	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.496	mg	955224	7131
				supplier	solder	Silver (Ag)	7440-22-4		0.065	mg	24876	186
				supplier	solder	Tin (Sn)	7440-31-5		0.052	mg	19900	149
				supplier	wire	Aluminium (Al)	7429-90-5		0.110	mg	990991	314
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	9009	3
Encapsulation	Other Organic Materials	178.097	mg	supplier	mold compound	Silica, vitreous	60676-86-0		143.546	mg	805999	410131
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		12.467	mg	70001	35620
				supplier	mold compound	Phenol resin	9003-35-4		7.124	mg	40001	20354
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		10.686	mg	60001	30531
				supplier	mold compound	Antimony Trioxide	1309-64-4		2.137	mg	11999	6106
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		1.247	mg	7002	3563
connections coating	Solder	1.045	mg	supplier	mold compound	Carbon black	1333-86-4		0.890	mg	4997	2543
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	2986