



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 *	2015-10-21
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		

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<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
STD45P4LLF6AG	TXDP*6B44A62	A	SHENZHEN B/E	2015-10-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	330.00	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	TO 252 DPAK			

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-15th June 2015				
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	TXDP*6B44A62					
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	2.736	mg	supplier	die	Silicon (Si)	7440-21-3		2.657	mg	971126	8052
				supplier	metallization	Aluminium (Al)	7429-90-5		0.032	mg	11696	97
				supplier	Passivation	Silicon Oxide	7631-86-9		0.015	mg	5482	45
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.003	mg	1096	9
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.022	mg	8041	67
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.007	mg	2558	21
Leadframe	Copper & its alloys	166.150	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.152	mg	987975	497430
				supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		0.330	mg	1986	1000
				supplier	alloy	Cobalt (Co)	7440-48-4		0.462	mg	2781	1400
				supplier	metallization	Nickel (Ni)	7440-02-0		1.199	mg	7216	3633
				supplier	metallization	Phosphorus (P)	12185-10-3		0.007	mg	42	21
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high me	3.434	mg	954950	10406
Soft solder	Solder	3.596	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.434	mg	954950	10406
				supplier	solder	Silver (Ag)	7440-22-4		0.090	mg	25028	273
				supplier	solder	Tin (Sn)	7440-31-5		0.072	mg	20022	218
Bonding wires	Other inorganic materials	1.693	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.693	mg	1000000	5130
				supplier	wire	Aluminium (Al)	7429-90-5		1.693	mg	1000000	5130
Encapsulation	Other Organic Materials	154.780	mg	supplier	mold compound	Silica, vitreous	60676-86-0		124.753	mg	806002	378039
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.835	mg	70003	32833
				supplier	mold compound	Phenol resin	9003-35-4		6.191	mg	39999	18761
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.287	mg	60001	28142
				supplier	mold compound	Antimony Trioxide	1309-64-4		1.857	mg	11998	5627
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		1.083	mg	6997	3282
				supplier	mold compound	Carbon black	1333-86-4		0.774	mg	5001	2345
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167