



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 *	2016-05-25
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	Representative Title	ADG 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

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 omprehensive 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
STB20NM60T4	T2D2*MD67B62	A	SHENZHEN B/E	2016-05-25
Amount	UoM	Unit type	ST ECOPACK Grade	
1500.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-9.15-4.5	2	GULL WING	
Comment	D2PAK			

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 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	T2D2*MD67B62					
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	23.802	mg	supplier	die	Silicon (Si)	7440-21-3		23.118	mg	971263	15412
				supplier	metallization	Aluminium (Al)	7429-90-5		0.336	mg	14116	224
				supplier	Passivation	Silicon Nitride	12033-89-5		0.081	mg	3403	54
				supplier	Passivation	Silicon Oxide	7631-86-9		0.116	mg	4874	77
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	336	5
				supplier	back side metallization	Gold (Au)	7440-57-5		0.025	mg	1050	17
Leadframe	Copper & its alloys	779.567	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.118	mg	4958	79
				supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	997396	518358
				supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	459	239
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.654	mg	839	436
				supplier	metallization	Nickel (Ni)	7440-02-0		1.012	mg	1298	675
				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
Soft solder	Solder	16.192	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	15.463	mg	954978	10309
				supplier	solder	Silver (Ag)	7440-22-4		0.405	mg	25012	270
				supplier	solder	Tin (Sn)	7440-31-5		0.324	mg	20010	216
				supplier	wire	Aluminium (Al)	7429-90-5		1.211	mg	999340	807
				supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	660	1
				supplier	mold compound	Silica, vitreous	60676-86-0		592.146	mg	874999	394764
Encapsulation	Other Organic Materials	676.739	mg	supplier	mold compound	Tetramethyl-biphenyl-diyl-bis oxymethylene-bi	EC 413-900-7		27.070	mg	40001	18047
				supplier	mold compound	Epoxy Resin	25068-38-6		20.302	mg	30000	13535
				supplier	mold compound	phenol resin	29690-82-2		33.837	mg	50000	22558
				supplier	mold compound	Carbon black	1333-86-4		3.384	mg	5000	2256
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1659