



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 *	2016-07-29
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 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
STW18N60DM2	TSLW*FQ6GB62	A	SHENZHEN B/E	2016-07-29
	Amount	UoM	Unit type	ST ECOPACK Grade
	4430.00	mg	Each	ECOPACK2

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	15.75-20.15-5.15	2	THROUGH HOLE	
Comment	TO 247			

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-20th June 2016				
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	TSLW*FQ6B62					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	8.507	mg	supplier	die	Silicon (Si)	7440-21-3		8.169	mg	960268	1844
				supplier	metallization	Aluminium (Al)	7429-90-5		0.162	mg	19043	37
				supplier	Passivation	Silicon Nitride	12033-89-5		0.039	mg	4584	9
				supplier	Passivation	Silicon Oxide	7631-86-9		0.057	mg	6700	13
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	470	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.056	mg	6584	13
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.020	mg	2351	5
Leadframe	Copper & its alloys	2720.611	mg	supplier	alloy	Copper (Cu)	7440-50-8		2705.048	mg	994280	610620
				supplier	alloy	Iron (Fe)	7439-89-6		1.246	mg	458	281
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.275	mg	836	512
				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4399	2702
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Die attach	Other Organic Materials	7.769	mg	JIG - R	solder	Lead (Pb)	7439-92-1		7.420	mg	955078	1675
				supplier	solder	Silver (Ag)	7440-22-4		0.194	mg	24971	44
				supplier	solder	Tin (Sn)	7440-31-5	7a-Lead in high mel	0.155	mg	19951	35
Bonding wires	Other inorganic materials	0.643	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.640	mg	995025	144
				supplier	wire	Magnesium (Mg)	7439-95-4		0.003	mg	4975	1
				supplier								
Encapsulation	Other Organic Materials	1686.273	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1467.058	mg	870000	331164
				supplier	mold compound	Epoxy resin	25068-38-6		168.627	mg	100000	38065
				supplier	mold compound	Phenol resin	29690-82-2		42.157	mg	25000	9516
				supplier	mold compound	Carbon Black	1333-86-4		8.431	mg	5000	1903
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1399