



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 *	2016-08-26
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		

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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
STW58N60DM2AG	TSLW*FQ6BA62	A	SHENZHEN B/E	2016-08-26
	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*FQ6BA62					
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	36.110	mg	supplier	die	Silicon (Si)	7440-21-3		34.651	mg	959596	7822
				supplier	metallization	Aluminium (Al)	7429-90-5		0.701	mg	19413	158
				supplier	Passivation	Silicon Nitride	12033-89-5		0.167	mg	4625	38
				supplier	Passivation	Silicon Oxide	7631-86-9		0.248	mg	6868	56
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.017	mg	470	4
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.241	mg	6674	54
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.085	mg	2354	19
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	514
				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4399	2702
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Soft solder	Solder	31.856	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	30.423	mg	955016	6867
				supplier	solder	Silver (Ag)	7440-22-4		0.796	mg	24987	180
				supplier	solder	Tin (Sn)	7440-31-5		0.637	mg	19997	144
Bonding wires	Other inorganic materials	1.447	mg	supplier	wire	Aluminium (Al)	7429-90-5		1.440	mg	995025	325
				supplier	wire	Magnesium (Mg)	7439-95-4		0.007	mg	4975	2
Encapsulation	Other Organic Materials	1633.779	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1421.388	mg	870000	320855
				supplier	mold compound	Epoxy resin	25068-38-6		163.378	mg	100000	36880
				supplier	mold compound	Phenol resin	29690-82-2		40.844	mg	25000	9220
				supplier	mold compound	Carbon Black	1333-86-4		8.169	mg	5000	1844
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1399