



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

** : Required Field*


Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-11-21
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	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
STGW30M65DF2	TDLW*KLF5R52	A	SHENZHEN B/E	2016-11-21
	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	3	Through-hole	
Comment	TO 247			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TDLW*KLF5R52					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Dies	Other inorganic materials	7.345	mg	supplier	die	Silicon (Si)	7440-21-3		6.914	mg	941321	1561
				supplier	metallization	Aluminium (Al)	7429-90-5		0.142	mg	19333	32
				supplier	Passivation	Silicon Nitride	12033-89-5		0.019	mg	2588	4
				supplier	Passivation	Silicon Oxide	7631-86-9		0.044	mg	5990	10
				supplier	back side metallization	Aluminium (Al)	7429-90-5		0.029	mg	3948	7
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.009	mg	1225	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.007	mg	953	2
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.098	mg	13342	22
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.005	mg	681	1
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.021	mg	2859	5
				supplier	polymer die coating	Propimide	proprietary		0.057	mg	7760	13
				supplier	alloy	Copper (Cu)	7440-50-8		2821.522	mg	998350	636912
				Leadframe	Copper & its alloys	2826.184	mg	supplier	alloy	Iron (Fe)	7439-89-6	
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						2.373	mg	840	533
supplier	metallization	Nickel (Ni)	7440-02-0						0.915	mg	324	207
supplier	metallization	Phosphorus (P)	12185-10-3						0.074	mg	26	17
supplier	alloy	Lead (Pb)	7439-92-1					7a-Lead in high mel	9.229	mg	954988	2083
Soft solder	Solder	9.664	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.242	mg	25041	55
				supplier	solder	Tin (Sn)	7440-31-5		0.193	mg	19971	44
				supplier	wire	Aluminium (Al)	7429-90-5		1.700	mg	995899	384
Bonding wires	Other inorganic materials	1.707	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.007	mg	4101	2
				supplier	mold compound	Silica, vitreous	60676-86-0		1370.950	mg	870000	309470
Encapsulation	Other Organic Materials	1575.804	mg	supplier	mold compound	Epoxy resin	25068-38-6		157.580	mg	100000	35571
				supplier	mold compound	Phenol resin	29690-82-2		39.395	mg	25000	8893
				supplier	mold compound	Carbon Black	1333-86-4		7.879	mg	5000	1779
				supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098
Connections coating	Solder	9.296	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		9.296	mg	1000000	2098