



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 *	2016-07-14
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
STTH60R04W	HSLV*G18L11F	A	SHENZHEN B/E	2016-07-14
Amount		UoM	Unit type	ST ECOPACK Grade
4400.00		mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
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	DO 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	HSLV*G18L11F					
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	30.057	mg	supplier	die	Silicon (Si)	7440-21-3		29.286	mg	974349	6656
				supplier	metallization	Aluminium (Al)	7429-90-5		0.091	mg	3027	21
				supplier	Passivation	Silicon Oxide	7631-86-9		0.119	mg	3959	27
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.014	mg	466	3
				supplier	back side metallization	Gold (Au)	7440-57-5		0.043	mg	1431	10
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.200	mg	6654	45
Leadframe	Copper & its alloys	2711.612	mg	supplier	alloy	Copper (Cu)	7440-50-8		2696.060	mg	994265	612741
				supplier	alloy	Iron (Fe)	7439-89-6		1.242	mg	458	282
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		2.268	mg	836	515
				supplier	metallization	Nickel (Ni)	7440-02-0		11.968	mg	4414	2720
				supplier	metallization	Phosphorus (P)	12185-10-3		0.074	mg	27	17
Soft solder	Solder	26.564	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	25.369	mg	955014	5766
				supplier	solder	Silver (Ag)	7440-22-4		0.664	mg	24997	151
				supplier	solder	Tin (Sn)	7440-31-5		0.531	mg	19989	121
Bonding wires	Other inorganic materials	4.925	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.925	mg	1000000	1119
Encapsulation	Other Organic Materials	1620.645	mg	supplier	mold compound	Silica, vitreous	60676-86-0		1409.961	mg	870000	320446
				supplier	mold compound	Epoxy resin	25068-38-6		162.065	mg	100000	36833
				supplier	mold compound	Phenol resin	29690-82-2		40.516	mg	25000	9208
				supplier	mold compound	Carbon Black	1333-86-4		8.103	mg	5000	1842
Connections coating	Solder	6.197	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		6.197	mg	1000000	1408