

Materials Declaration Form

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

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	2017-10-27					
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section					
Authorized Representative *	ovanni Giacopello Representative Title		ADG MD CHAMPION					
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section					
Sunnlier 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								
STTH1R02Q	HNRH*C94F814	А	ZA41	2017-10-27				
	Amount	UoM	Unit type	ST ECOPACK Grade				
	400.00	mg	Each	ECOPACK® 2				

Manufacturing information								
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles						
Not Applicable	Not Applicable	Not Applicable						
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented				
Not Applicable	Tin (Sn), matte	Copper Alloy		moradginomod				

Package Designator	Size	Nbr of instances	Shape	
RAD	6.4 - 10.17 - 3.24	2	Through-hole	
Comment	Package: DO 15			

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 requiremen	1 - Product(s) meets EU RoHS requirement without any exemptions fals						
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)							
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s) true							
4 - Product(s) does not meet EU RoHS req	4 - Product(s) does not meet EU RoHS requirements and is not under exemptions						
5 - Product(s) is obsolete, no information	is available	false					
6 - Product(s) is unknown, no information	is available	false					
Exemption Id.	Exemption Id. Description						
7a	7a Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)						

Query : California Prop65 list, dated 27th January 2017							
Query							
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen							
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen							
Substance amount in product (mg) Application							
Nickel	15						
Lead	4.44	Soft solder	11098				

QueryList: REACH-12th January 2017								
Query Response								
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH								
CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application								

Naterial Composition Declaration					Mfr Item Name	HNRH*	C94F814					
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	1.063	mg	supplier	die	Silicon (Si)	7440-21-3		0.939	mg	883349	2348
				supplier	metallization	Aluminium (Al)	7429-90-5		0.108	mg	101599	270
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	8467	23
				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	941	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.006	mg	5644	15
Leadframe	Copper & its alloys	286.918	mg	supplier	alloy	Copper (Cu)	7440-50-8		286.783	mg	999529	716958
				supplier	alloy	Zinc (Zn)	7440-66-6		0.011	mg	38	28
				supplier	alloy	Iron (Fe)	7439-89-6		0.028	mg	98	70
				supplier	alloy	Phosphorus (P)	12185-10-3		0.096	mg	335	240
Soft solder	Solder	4.799	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	4.439	mg	924984	11098
				supplier	solder	Silver (Ag)	7440-22-4		0.240	mg	50010	600
				supplier	solder	Tin (Sn)	7440-31-5		0.120	mg	25006	300
Encapsulation	Other Organic Materials	103.221	mg	supplier	mold compound	Quartz	14808-60-7		80.513	mg	780006	201283
				supplier	mold compound	epoxy resin	29690-82-2		14.967	mg	145000	37418
				supplier	mold compound	phenol resin	9003-35-4		7.225	mg	69995	18063
				supplier	mold compound	Carbon Black	1333-86-4		0.516	mg	4999	1290
Connections coating	Solder	3.999	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.999	mg	1000000	9993