



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 *	2017-11-14
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giuseppe Vitali Palma	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
	R2(9*OD0JR52	A	3068	2017-11-14
Amount	UoM	Unit type	ST ECOPACK Grade	
1380.00	mg	Each	ECOPACK1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-7.2-4.5	3	GULL WING	
Comment	PACKAGE: H2PAK HC 2-3 Leads; MD valid for STH240N10F7-2, UNI25H100, STH24810-2			

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)

Query : California Prop65 list, dated 27th January 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.31	Die back side metal - Leadframe metal	227
Lead	14.56	Soft solder	10554
Cobalt	2.37	Leadframe alloy	1720
Antimony trioxide	5.78	Molding compound	4188

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				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	RZ(9*OD0R52					
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	12.496	mg	supplier	die	Silicon (Si)	7440-21-3		11.978	mg	958547	8680
				supplier	metallization	Aluminium (Al)	7429-90-5		0.156	mg	12483	113
				supplier	metallization	Titanium (Ti)	7440-32-6		0.030	mg	2401	22
				supplier	Passivation	Silicon Oxide	7631-86-9		0.178	mg	14245	129
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.008	mg	640	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.099	mg	7923	72
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.007	mg	560	5
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.040	mg	3201	29
				supplier	alloy	Copper (Cu)	7440-50-8		843.709	mg	994929	611383
Leadframe	Copper & its alloys	848.010	mg	supplier	alloy	CopperPhosphorous (CuP)	12517-41-8		1.696	mg	2000	1229
				supplier	alloy	Cobalt (Co)	7440-48-4		2.374	mg	2799	1720
				supplier	metallization	Nickel (Ni)	7440-02-0		0.214	mg	252	155
				supplier	metallization	Phosphorus (P)	12185-10-3		0.017	mg	20	12
				supplier	alloy	Lead (Pb)	7439-92-1	7a-Lead in high met	14.564	mg	955016	10554
Soft solder	Solder	15.250	mg	JIG - R	solder	Silver (Ag)	7440-22-4		0.381	mg	24984	276
				supplier	solder	Tin (Sn)	7440-31-5		0.305	mg	20000	221
				supplier	wire	Aluminium (Al)	7429-90-5		0.153	mg	993506	111
Bonding wires	Other inorganic materials	0.154	mg	supplier	wire	Magnesium (Mg)	7439-95-4		0.001	mg	6494	1
				supplier	Ribbon	Aluminium (Al)	7429-90-5		18.590	mg	1000000	13471
Bonding Ribbons	Other Nonferrous metals & alloys	18.590	mg	supplier	mold compound	Silica, vitreous	60676-86-0		388.303	mg	805999	281379
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		33.724	mg	70001	24438
Encapsulation	Other Organic Materials	481.766	mg	supplier	mold compound	Phenol resin	9003-35-4		19.271	mg	40001	13964
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		28.906	mg	60000	20946
				supplier	mold compound	Antimony Trioxide	1309-64-4		5.781	mg	12000	4189
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.372	mg	6999	2443
				supplier	mold compound	Carbon black	1333-86-4		2.409	mg	5000	1746
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.734	mg	1000000	2706
Connections coating	Solder	3.734	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.734	mg	1000000	2706