



Materials Declaration Form

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

*: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-05-02
Contact Name *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Authorized Representative *	Rossana Bonaccorso
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		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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
		A	994X	2018-05-02
	Amount	UoM	Unit type	ST ECOPACK Grade
	320	mg	Each	ECOPACK2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	6.5-6.1-2.3	3	GULL WING	
Comment	Package: TO 252 DPAK - MDF valid for BOM 1F031423 - Rls: HWDP*W01G101 - HWDP*W16A112 - HWDP*W17A112 - HWDP*W28A011 - HWDP*W40G201 - HWDP*W41G201 - HWDP*W52B111 - HWDP*W53D111 - JWDP*W01G101 - JWDP*W40G201 - JWDP*W53D111			

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 : California Prop65 list, dated 15th December 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	0.02	Die	75
Lead	3.39	Leadframe	10591

QueryList : REACH-15th January 2018				
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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HWDP*W01G101					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	5.057	mg	supplier	die	Silicon (Si)	7440-21-3		4.930	mg	974886	15406
				supplier	metallization	Aluminium (Al)	7429-90-5		0.043	mg	8503	134
				supplier	Passivation	Silicon Oxide	7631-86-9		0.014	mg	2768	44
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	396	6
				supplier	back side metallization	Gold (Au)	7440-57-5		0.005	mg	989	16
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.024	mg	4746	75
Leadframe	M-004 Copper and its alloys	164.944	mg	supplier	polymer die coating	Probimide	Proprietary		0.039	mg	7712	122
				supplier	alloy	Copper (Cu)	7440-50-8		164.729	mg	998697	514778
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	516
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	303	156
Soft solder	Solder	3.549	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high met	3.389	mg	954917	10591
				supplier	solder	Silver (Ag)	7440-22-4		0.089	mg	25077	278
				supplier	solder	Tin (Sn)	7440-31-5		0.071	mg	20006	222
Bonding wires	M-011 Other inorganic materials	0.369	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.369	mg	1000000	1153
				supplier	mold compound	Silica, vitreous	60676-86-0		130.169	mg	897494	406778
				supplier	mold compound	Epoxy resin	25068-38-6		10.153	mg	70003	31728
Encapsulation	M-011 Other inorganic materials	145.036	mg	supplier	mold compound	Phenol resin	29690-82-2		4.351	mg	29999	13597
				supplier	mold compound	carbon black	1333-86-4		0.363	mg	2504	1134
				supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3266