



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 *	2018-09-21
Company Unique ID	NL 008751171801		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	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		

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
	TMDP*EL6CB32	A	3068	2018-09-21
Amount	UoM	Unit type	ST ECOPACK Grade	
330.00	mg	Each	ECOPACK1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
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 CPs: STD20NF06LT4 and STD20NF06LAG			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 25th May 2018			
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	0.11	Die - Leadframe	336
Lead	3.12	Soft solder	9445
Antimony trioxide	1.88	Encapsulation	5697

QueryList : REACH-27th June 2018				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	3.12	Soft solder	9445
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				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	3.12	Soft solder	954963

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	TMDP*EL6CB32				6000000.0	1000000.0
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	3.369	mg	supplier	die	Silicon (Si)	7440-21-3		3.244	mg	962897	9830
				supplier	metallization	Aluminium (Al)	7429-90-5		0.063	mg	18700	191
				supplier	Passivation	Silicon Nitride	12033-89-5		0.014	mg	4156	42
				supplier	Passivation	Silicon Oxide	7631-86-9		0.018	mg	5343	55
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	592	6
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.019	mg	5640	58
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	297	3
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.008	mg	2375	24
Leadframe	M-004 Copper and its alloys	165.044	mg	supplier	alloy	Copper (Cu)	7440-50-8		164.730	mg	998097	499182
				supplier	alloy	Iron (Fe)	7439-89-6		0.165	mg	1000	500
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.050	mg	304	152
				supplier	metallization	Nickel (Ni)	7440-02-0		0.092	mg	557	279
				supplier	metallization	Phosphorus (P)	7723-14-0		0.007	mg	42	21
Soft solder	Solder	3.264	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	3.117	mg	954963	9445
				supplier	solder	Silver (Ag)	7440-22-4		0.082	mg	25123	248
				supplier	solder	Tin (Sn)	7440-31-5		0.065	mg	19914	197
Bonding wires	M-011 Other inorganic materials	0.458	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.456	mg	995633	1382
				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	4367	6
				supplier	mold compound	Silica, vitreous	60676-86-0		126.397	mg	806001	383021
Encapsulation	M-011 Other inorganic materials	156.820	mg	supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		10.977	mg	69997	33264
				supplier	mold compound	Phenol resin	9003-35-4		6.273	mg	40001	19009
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		9.409	mg	59999	28512
				supplier	mold compound	Antimony Trioxide	1309-64-4		1.882	mg	12001	5703
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		1.098	mg	7002	3327
				supplier	mold compound	Carbon black	1333-86-4		0.784	mg	4999	2376
Connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167