



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 *	2020-10-20
Company Unique ID	NL 008751171B01		
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 *	giovanni giacopello	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
MJD44H11T4-A	TMDP*B553A62	A	3068	2020-10-20
	Amount	UoM	Unit type	ST ECOPACK Grade
	330	mg	Each	ECOPACK 1
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	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00423468	



Package Designator	Size	Nbr of instances	Shape	
SIP	6.50,6.10,2.30	3	gull wing	
Comment	TO 252 DPAK			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated 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 2020/363_ March 2020	
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 3rd January 2020			
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	0.30	die - leadframe	894
Lead	2.58	soft solder	7809
Antimony trioxide	1.06	encapsulation	3212

QueryList : REACH-25th June 2020				
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	2.58	Soft solder	7809
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	2.577	Soft solder	954798

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Tin,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	TMDP*B553A62					
note : Substance present with less 0.001mg will not be declared in this document												
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	4.720	mg	supplier	die	Silicon(Si)	7440-21-3		4.551	mg	964194	13792
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.058	mg	12288	176
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.032	mg	6780	97
				supplier	metallisation	Silver(Ag)	7440-22-4		0.011	mg	2331	33
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	424	6
				supplier	passivation	Silicon oxide	7631-86-9		0.066	mg	13983	200
Leadframe	M-004 Copper and its alloys	232.627	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		232.036	mg	997459	703139
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.263	mg	1131	797
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.232	mg	997	703
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.070	mg	301	212
				supplier	alloy & coating	Phosphorus metal	7723-14-0		0.026	mg	112	79
Soft solder	Solder	2.699	mg	SVHC	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	2.577	mg	954798	7809
				supplier	solder	Silver(Ag)	7440-22-4		0.068	mg	25195	206
				supplier	solder	Tin(Sn)	7440-31-5		0.054	mg	20007	164
Bonding wires	M-003 Aluminum and its alloys	0.362	mg	supplier	wire	Aluminium (Al)	7429-90-5		0.360	mg	994475	1091
				supplier	wire	Magnesium (Mg)	7439-95-4		0.002	mg	5525	6
Encapsulation	M-011 Other inorganic materials	88.547	mg	supplier	mold compound	Silica vitreous	60676-86-0		72.874	mg	822998	220830
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		6.198	mg	69997	18782
				supplier	mold compound	Phenol resin	9003-35-4		3.542	mg	40001	10733
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		2.656	mg	29995	8048
				supplier	mold compound	Antimony trioxide	1309-64-4		1.063	mg	12005	3221
				supplier	mold compound	Brominated epoxy resin	40039-93-8		1.771	mg	20001	5367
connections coating	Solder	1.045	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.045	mg	1000000	3167