



## 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 *	2020-12-11
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 *	Floriana SAN BIAGIO	Representative Title	AMS Material Declaration champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

**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
	FC2X*UBDBBB5	A	P1C7	2020-12-11
Amount	UoM	Unit type	ST ECOPACK Grade	
65	mg	Each	ECOPACK® 2	
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	
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	,	

Package Designator	Package Size	Nbr of instances	Shape
QFN	5 x 6	44	Flat
Comment	B02X WFQFN 44L 5X6X0.8 PITCH 0.4; MDF is valid for STPMIC1DPQR		

QueryList : RoHS Directive 2011/65/EU- 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption id.	Description

QueryList : ELV directive : 2000/53/EC amended 2020/363_March 2020	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	true
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Exemption id.	Description

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	0.42	die/alloy&coating	6523

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014				
Query				Response
1 - Product(s) requires marking for the presence of restricted substances and must be marked with an Environmental Protection Use Period under China's Measures for Administration of the control of pollution by Electronic Information Products				false
2 - Product(s) is eligible for marking with the e code under China's Measures for Administration of the control of pollution by Electronic Information Products				false
Hasardous substance				
Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Hexavalent Chromium (Cr VI)	PBB & PBDE

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				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

QueryList : 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 in the component :	Cobalt, Gold, Tungsten,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update				
Query				Response
The Product does contain at least one of the substances listed in Chemical Control Act				false
Substance	Homogeneous Material impacted	Content in Homogeneous Material (mg)	Concentration in the material(%)	Application Purpose

Material Composition Declaration : note : Substance present with less 0.001mg. will not be declared in this document						Mfr. Item Name	FC2X*UBDBB5	65.0000		5000001.0	1000001.0	
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	6.380	mg	supplier	die	Silicon(Si)	7440-21-3		6.077	mg	952508	93492
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.061	mg	9561	938
				supplier	metallisation	Chromium(Cr)	7440-47-3		0.005	mg	784	77
				supplier	metallisation	Copper(Cu)	7440-50-8		0.010	mg	1567	154
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.001	mg	157	15
				supplier	metallisation	Gold(Au)	7440-57-5		0.012	mg	1881	185
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.023	mg	3605	354
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	470	46
				supplier	metallisation	Tungsten(W)	7440-33-7		0.006	mg	940	92
				supplier	metallisation	Vanadium(V)	7440-62-2		0.001	mg	157	15
				supplier	passivation	Silicon oxide	7631-86-9		0.116	mg	18182	1785
				supplier	polymer coating	polyimide	proprietary		0.065	mg	10188	1000
				Leadframe	M-004 Copper and its alloys	37.195	mg	supplier	alloy	Copper(Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.632	mg	16992	9723
supplier	alloy	Iron phosphide	26508-33-8						0.147	mg	3952	2262
supplier	metallization	Nickel (Ni)	7440-02-0						0.401	mg	10781	6169
supplier	metallization	Palladium (Pd)	7440-05-3						0.045	mg	1210	692
supplier	metallization	Gold (Au)	7440-57-5						0.008	mg	215	123
Die attach	M-015 Other organic materials	1.089	mg	supplier	glue	Silver(Ag)	7440-22-4		0.870	mg	798898	13385
				supplier	glue	Bisphenol F type epoxy resin	9003-36-5		0.087	mg	79890	1338
				supplier	glue	Epoxy resin	68475-94-5		0.033	mg	30303	508
				supplier	glue	Diglycidyl phenyl allyl ether	EC 417-470-1		0.033	mg	30303	508
				supplier	glue	Other	proprietary		0.033	mg	30303	508
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.033	mg	30303	508
				supplier	wire	Copper(Cu)	7440-50-8		0.482	mg	1000000	7415
Encapsulation	M-015 Other organic materials	19.854	mg	supplier	mold compound	Silica vitreous	60676-86-0		17.471	mg	879974	268785
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.993	mg	50015	15277
				supplier	mold compound	Phenolic resin	205830-20-2		0.774	mg	38985	11908
				supplier	mold compound	Epoxy type resin	proprietary		0.397	mg	19996	6108
				supplier	mold compound	Carbon black	1333-86-4		0.040	mg	2015	615
				supplier	mold compound	other	proprietary		0.179	mg	9016	2754