



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 *	2020-05-11
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 *	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

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
VN7000AYTR	RRVC*VH80CBX	A	959	2020-05-11
	Amount	UoM	Unit type	ST ECOPACK Grade
	488	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		
3	260	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), matte, annealed	Copper Alloy	DM00640524	



Package Designator	Size	Nbr of instances	Shape	
QFP	10.30,7.50,2.28	36	gull wing	
Comment	PwSSO36 DUAL CHIP			

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 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	0.12	die	242
Lead	10.12	soft solder	20744

QueryList : REACH-16th January 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	10.12	Soft solder	20744
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	10.123	Soft solder	974959

Material Composition Declaration :						Mfr Item Name	RRVC*VH80CBX					
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)
Dies	M-011 Other inorganic materials	24.050	mg	supplier	die	Silicon(Si)	7440-21-3		22.271	mg	926029	45637
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.415	mg	17256	850
				supplier	metallisation	Copper(Cu)	7440-50-8		0.153	mg	6363	318
				supplier	metallisation	Gold(Au)	7440-57-5		0.029	mg	1206	59
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.118	mg	4906	242
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.045	mg	1871	92
				supplier	metallisation	Tungsten(W)	7440-33-7		0.468	mg	19459	959
				supplier	metallisation	Vanadium(V)	7440-62-2		0.009	mg	374	18
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.047	mg	1954	96
				supplier	passivation	Silicon oxide	7631-86-9		0.250	mg	10395	512
Leadframe	M-004 Copper and its alloys	159.665	mg	supplier	polymer coating	PIX1 Gamma-butyrolactone	Proprietary		0.245	mg	10187	502
				supplier	alloy & coating	Copper(Cu)	7440-50-8		155.390	mg	973225	318422
				supplier	alloy & coating	Iron(Fe)	7439-89-6		3.655	mg	22892	7490
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.220	mg	1378	451
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.191	mg	1196	391
Die attach	M-011 Other inorganic materials	0.151	mg	supplier	alloy & coating	Silver (Ag)	7440-22-4		0.209	mg	1309	428
				supplier	tape	Epoxy resin	25068-38-6		0.095	mg	629139	195
				supplier	tape	Polypropylene	9003-07-0		0.003	mg	19868	6
				supplier	tape	epoxy resin	29690-82-2		0.015	mg	99338	31
				supplier	tape	Propenoate polymer	538311-13-6		0.030	mg	198675	61
Soft solder	Solder	10.383	mg	supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.008	mg	52980	16
				supplier	solder	Lead(Pb)	7439-92-1	7a-Lead in high melting temper	10.123	mg	974959	20744
				supplier	solder	Silver(Ag)	7440-22-4		0.156	mg	15025	320
Bonding wires	M-004 Copper and its alloys	4.641	mg	supplier	solder	Tin(Sn)	7440-31-5		0.104	mg	10016	213
				supplier	wire	Copper(Cu)	7440-50-8		4.641	mg	1000000	9510
Bonding wires 2	M-004 Copper and its alloys	4.256	mg	supplier	wire	Copper(Cu)	7440-50-8		4.256	mg	1000000	8721
Encapsulation	M-011 Other inorganic materials	280.602	mg	supplier	mold compound	Silica vitreous	60676-86-0		242.440	mg	864000	496803
				supplier	mold compound	Epoxy type resin	proprietary		21.045	mg	74998	43125
				supplier	mold compound	Phenol type resin	proprietary		14.030	mg	50000	28750
				supplier	mold compound	Mercaptopropyl trimethoxysilane	4420-74-0		1.403	mg	5000	2875
				supplier	mold compound	Quartz	14808-60-7		0.842	mg	3001	1725
connections coating	Solder	4.252	mg	supplier	mold compound	Carbon black	1333-86-4		0.842	mg	3001	1725
connections coating	Solder	4.252	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.252	mg	1000000	8713