



Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-04-08
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 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
	NNQ7*MV61BE6	A	997G	2020-04-08
Amount	UoM	Unit type	ST ECOPACK Grade	
150	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	0	

Package Designator	Size	Nbr of instances	Shape
DSO	9.85 x 3.9	16	gull wing
Comment	Q7 SO 16 .15 TO JEDEC MS-012; MDF is valid for VIPER16LDTR and VIPER16LD		

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	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	0.13	leadframe	880

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				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 : 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				NO
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	NNQ7*MV61BE6				5000000.0	1000295.0
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	3.625	mg	supplier	die	Silicon(Si)	7440-21-3		3.510	mg	968276	23400
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.041	mg	11310	273
				supplier	metallisation	Gold(Au)	7440-57-5		0.003	mg	828	20
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.015	mg	4138	100
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	276	7
				supplier	metallisation	Tungsten(W)	7440-33-7		0.008	mg	2207	53
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.013	mg	3586	87
				supplier	passivation	Silicon oxide	7631-86-9		0.034	mg	9379	227
Leadframe	M-004 Copper and its alloys	32.089	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		31.145	mg	970582	207633
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.117	mg	3646	780
				supplier	alloy & coating	Iron(Fe)	7439-89-6		0.733	mg	22843	4887
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.044	mg	1371	293
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.038	mg	1184	253
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.004	mg	125	27
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.004	mg	125	27
				supplier	alloy & coating	Gold(Au)	7440-57-5		0.004	mg	125	27
Die attach	M-015 Other organic materials	0.498	mg	supplier	glue	Silver (Ag)	7440-22-4		0.406	mg	815261	2707
				supplier	glue	Acrylate resins	7534-94-3		0.060	mg	120482	400
				supplier	glue	Heterocyclic organic compound	3006-93-7		0.015	mg	30120	100
				supplier	glue	Fluoroaliphatic Polymeric Esters	1017237-78-3		0.002	mg	4016	13
				supplier	glue	Treated silica	Proprietary		0.015	mg	30120	100
Bonding wires	M-008 Precious metals	0.213	mg	supplier	wire	Gold (Au)	7440-57-5		0.213	mg	1000000	1420
Encapsulation	M-011 Other inorganic materials	113.619	mg	supplier	mold compound	Silica vitreous	60676-86-0		100.780	mg	887000	671867
				supplier	mold compound	epoxy resin	Proprietary		9.090	mg	80004	60600
				supplier	mold compound	Phenol resin	Proprietary		3.409	mg	30004	22727
				supplier	mold compound	carbon black	1333-86-4		0.340	mg	2992	2267