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 ***	2022-09-12
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 *	MDG MD CHAMPION	**Representative Title**	MDG 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
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 omprehensive 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.		

Signature Not
Verified

Digitally signed by
MDF Champion
Date: 2022.12.09
18:59:11 +01:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
M24256E-FMC6TG	CGZW*2D560VB	A	P1C7	2022-09-12
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	16.00	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**	
1	260	3	
bulk Solder Termination	**Terminal Plating**	**Terminal Base Alloy**	**Comment**
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	

Package Designator	**Size**	**Nbr of instances**	**Shape**	
QFN	2X3X0.6	8	No lead	
Comment	Package : ZW UFDFPN 2x3x0.6 8L 0.5MM PITCH 7558452			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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 : REACH-17 Jan 2022	
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CGZW*2D560VB				6000001.0	1000002.0
Homogeneous Material	**Material Group**	Mass	UoM	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Die or dies	M-011 Other inorganic materials	0.322	mg	supplier	die	Silicon (Si)	7440-21-3		0.301	mg	934783	18813
				supplier	metallization	Aluminium (Al)	7429-90-5		0.002	mg	6211	125
				supplier	metallization	Copper (Cu)	7440-50-8		0.006	mg	18634	375
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.001	mg	3106	63
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	3106	63
				supplier	Passivation	Silicon Nitride	12033-89-5		0.002	mg	6211	125
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	27950	563
Lead-frame	M-011 Other inorganic materials	3.007	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.918	mg	970270	182353
				supplier	alloy	Iron (Fe)	7439-89-6		0.070	mg	23358	4390
				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	1195	225
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.003	mg	836	157
				supplier	coating	Nickel (Ni)	7440-02-0		0.012	mg	3980	748
				supplier	coating	Palladium (Pd)	7440-05-3		0.001	mg	255	48
				supplier	coating	Gold (Au)	7440-57-5		0.000	mg	106	20
Die Attach	M-011 Other inorganic materials	0.335	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		0.229	mg	684000	14341
				supplier	glue or soft solder	methylene diacrylate	42594-17-2		0.084	mg	250000	5242
				supplier	glue or soft solder	Dicyclopentenyloxyethyl methacrylate	68586-19-6		0.010	mg	30000	629
				supplier	glue or soft solder	Polymer of Polybutadiene + Anhydride	Proprietary		0.010	mg	30000	629
				supplier	glue or soft solder	Palladium (Pd)	7440-05-3		0.000	mg	1000	21
				supplier	glue or soft solder	Bis(α,α-dimethylbenzyl) peroxide	80-43-3		0.002	mg	5000	105
Wires	M-011 Other inorganic materials	0.021	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0.021	mg	1000000	1336
Encapsulation	M-011 Other inorganic materials	12.314	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		10.809	mg	877752	675539
				supplier	Moulding Compound	Phenolic resin	Proprietary		0.572	mg	46475	35768
				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.448	mg	36371	27992
				supplier	Moulding Compound	carbon black	1333-86-4		0.025	mg	2021	1555
				supplier	Moulding Compound	Zinc hydroxide	20427-58-1		0.012	mg	1010	778
				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.448	mg	36371	27992
Finishing	M-011 Other inorganic materials	0.000	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.000	mg	916800	7
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	24500	0