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 ***	**16-01-2024**
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 *	**Material Declaration champion**	**Representative Title**	**Material Declaration 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 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: 2024.01.16 16:21:57 +08:00

Product				
Mfr Item Number	**Mfr Item Name**	**Version**	**Mfr Site**	**Date**
STM32H573MIY3QTR	E13Y*484XXXX	A	997C	16-01-2024
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	17.47	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**	
Tin/Silver/Copper (SAC405)	NAC	Copper Alloy	**N/A**	

Package Designator	**Size**	**Nbr of instances**	**Shape**	
WLCSP	Not applicable	80	No lead	
Comment	Package : B0D4 WLCSP 80 DIE 484 DM00653986			

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-14th June 2023				
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**	**E13Y*484XXXX**				10000000.0	999998.7
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	9.149	mg	supplier	die	Silicon (Si)	7440-21-3		8.778	mg	959449	502424
				supplier	metallization	Aluminium (Al)	7429-90-5		0.044	mg	4809	2518
				supplier	metallization	Copper (Cu)	7440-50-8		0.138	mg	15084	7899
				supplier	metallization	Nickel (Ni)	7440-02-0		0.001	mg	109	57
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.022	mg	2405	1259
				supplier	metallization	Titanium (Ti)	7440-32-6		0.004	mg	437	229
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	109	57
				supplier	Passivation	Silicon Oxide	7631-86-9		0.161	mg	17598	9215
Coating film (LC89R)		0.516	mg	Supplier	Coating film	Silica	Proprietary		0.296	mg	574000	16962
				Supplier	Coating film	Epoxy resin	Proprietary		0.110	mg	213000	6294
				Supplier	Coating film	Acrylic resin	Proprietary		0.110	mg	213000	6294
Solder ball (SAC405)		3.289	mg	Supplier	Solder ball	Tin	7440-31-5		3.141	mg	955000	179803
				Supplier	Solder ball	Silver	7440-22-4		0.132	mg	40000	7531
				Supplier	Solder ball	Copper	7440-50-8		0.016	mg	5000	941
Repassivation (LTC9320)		0.341	mg	Supplier	Repassivation polymer(LTC9320)	Gamma.-Butyrolactone	96-48-0		0.153	mg	450000	8776
				Supplier	Repassivation polymer(LTC9320)	Polyamic acid ester	Proprietary		0.119	mg	350000	6826
				Supplier	Repassivation polymer(LTC9320)	Dimethyl sulfoxide	67-68-5		0.044	mg	130000	2535
				Supplier	Repassivation polymer(LTC9320)	Tetraethylene glycol dimethacrylate	Proprietary		0.017	mg	50000	975
				Supplier	Repassivation polymer(LTC9320)	Trialkoxylated amidocarboxylic silane	Proprietary		0.003	mg	10000	195
				Supplier	Repassivation polymer(LTC9320)	Oxime derivative	Proprietary		0.003	mg	10000	195
RDL metalization(Ti)		0.011	mg	Supplier	Runner/UBM (Metal Sputter)	Titanium	7440-32-6		0.011	mg	1000000	648
RDL metalization(Cu)		0.045	mg	Supplier	Runner/UBM (Metal Sputter)	Copper	7440-50-8		0.045	mg	1000000	2552
UBM metalization(Ti)		0.006	mg	Supplier	Runner/UBM (Metal Sputter)	Titanium	7440-32-6		0.006	mg	1000000	324
UBM metalization(Cu)		0.077	mg	Supplier	Runner/UBM (Metal Sputter)	Copper	7440-50-8		0.077	mg	1000000	4430
RDL Copper		0.825	mg	Supplier	RDL Copper	Copper	7440-50-8		0.825	mg	1000000	47212
UBM Copper		3.212	mg	Supplier	UBM Copper	Copper	7440-50-8		3.212	mg	1000000	183845