



Material declaration form

General information			
IPC	1752	Version	2
Form type*	Distribute		
Sectionals*	Material information	Subsectionals*	A-D
	Manufacturing information		*: Required Field
Supplier information			
Company name*	STMicroelectronics	Response date*	2025-04-17
Authorized representative*	Cyrille Boulloud	Representative title	APMS 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

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Legal statement

Supplier acceptance *	Legal declaration*	Standard
true		

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				
Manufacturing item number	Manufacturing item name	Version	Manufacturing site	Date
VL53L4EDV0DH/1	DEDH*3L1KBAQ	B	ST SHENZHEN -CHINA	2025-04-17
	Amount	Unit of measure	Unit type	ST ECOPACK grade
	18	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			

Manufacturing information				
J-STD-020 MSL rating	Classification temperature	Number of reflow cycles		
3	245	3		
Bulk solder termination	Terminal plating	Terminal base alloy	Comment	
Not Applicable	Nickel/Gold (Ni/Au)	Copper Alloy	DM00928452 1F147725 1F142286	
Package designator	Package Size	Number of instances	Shape	
LGA	4.3 x 2.3	12	Flat	
Comment	OPTICAL LGA12 4.4X2.4X1MM			

QueryList : RoHS Directive 2011/65/EU - 8 June 2011 – Annex II amended by Delegated Directive 2015/863 - 31 March 2015	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true

QueryList : ELV directive : 2000/53/EC amended 2020/363_ March 2020	Response
1 - Product(s) meets EU ELV requirement without any exemptions	true

QueryList : California Prop65 list, dated 3rd January 2025	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	0.194	Substrate	10659
Gallium Arsenide	0.016	Vcsel	879

QueryList : Chinese RoHS , references : SJT 11364 – 2014 and GBT 26572 – 2014	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

QueryList : REACH-21st January 2025	Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	true
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH	true

QueryList : Korea Chemical Control Act_ 27 Dec 2017 update	Response
The Product does contain at least one of the substances listed in Chemical Control Act	false



QueryList : Responsible metals sourcing	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
QueryList : China GB 33372-2020 Limit standard for volatile organic compounds content in adhesives - 4 March 2020 application date 1st December 2020	Response
The product contains adhesives identified under GB 33372	true
QueryList:Stockholm Convention Persistent Organic Pollutants (POP)	Response
Product is compliant with Annex A, B and C of Stockholm Convention Persistent Organic Pollutants	true
QueryList: EU Ship Recycling Regulation No. 1257/2013	Response
Product contains hazardous materials listed in Annex II of EU Ship Recycling Regulation No.1257/2013 and 2009/16/EC Directive	False
Other Fluorinated substance	Response
The product is containing fluorinated substance.	True
Substance Name, CAS	
Polytetrafluoroethylene, CAS 9002-84-0	True
BPA Declaration	Response
Product does not contain Bisphenol A (Isopropylidenediphenol)	True
Montreal Protocol	Response
Product does not contain Ozone Depleting Substances based on Annex I to Annex VII of EU REGULATION (EC) No 1005/2009	True
Environmental Protection Agency:Toxic Substances Control Act (TSCA). Section 6(h)	Response
Product does not contain Phenol, isopropylated, phosphate (3:1)	True



Material composition declaration - note - Substance present with less 0.001mg will not be declared in this document						Manufacturing Item name	DEDH*3L1KBAQ		18.2000		1000000.0	100000.0				
Homogeneous material	Material group	Mass	Unit of measure	Level	Substance category	Substance	CAS	Exempt	Mass	Unit of measure	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Dies	M-011 Other inorganic materials	1.134	mg	supplier	die	Silicon(Si)	7440-21-3		1.082	mg	954144	59451				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.005	mg	4409	275				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.013	mg	11464	714				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.005	mg	4409	275				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.001	mg	882	55				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.007	mg	6173	385				
				supplier	passivation	Silicon Oxide	7631-86-9		0.015	mg	13228	824				
				supplier	polymer coating	Polymer resist (color, planar,plens)	proprietary		0.006	mg	5291	330				
				supplier	core material	Thermosetting resin (Including filler)	proprietary		1.261	mg	143704	69286				
				supplier	core material	Fiber Glass wool	65997-17-3		0.669	mg	76239	36758				
Substrate	M-015 Other organic materials	8.775	mg	supplier	core material	Copper(Cu)	7440-50-8		0.010	mg	1140	549				
				supplier	ABF	Fiber glass	65997-17-3		0.922	mg	105071	50659				
				supplier	ABF	Thermosetting resin	25722-66-1		0.578	mg	65869	31758				
				supplier	ABF	amorphous silica	7631-86-9		0.167	mg	19031	9176				
				supplier	Solder mask	Acrylic resin	9003-01-4		0.517	mg	58917	28407				
				supplier	Solder mask	Barium sulfate	7727-43-7		0.072	mg	8205	3956				
				supplier	Solder mask	Silica vitreous	7631-86-9		0.072	mg	8205	3956				
				supplier	Solder mask	Talc	14807-96-6		0.036	mg	4103	1978				
				supplier	Solder mask	Additive	proprietary		0.022	mg	2507	1209				
				supplier	metallisation	Copper(Cu)	7440-50-8		4.221	mg	481026	231922				
				supplier	metallisation	California 65	metallisation	Nickel(Ni)	7440-02-0		0.194	mg	22108	10659		
				supplier	metallisation	Gold(Au)	7440-57-5		0.034	mg	3875	1868				
				Glue Die to substrate	M-015 Other organic materials	0.100	mg	supplier	tape	Epoxy acrylic resin	proprietary		0.048	mg	480000	2637
								supplier	tape	Phenol resin	9003-35-4		0.040	mg	400000	2198
Glue Vcsel to substrate	M-015 Other organic materials	0.004	mg	supplier	tape	other	proprietary		0.012	mg	120000	659				
				supplier	glue	Silver(Ag)	7440-22-4		0.004	mg	1000000	220				
Bonding wire	M-008 Precious metals	0.041	mg	supplier	wire	Gold(Au)	7440-57-5		0.041	mg	1000000	2253				
Glass & filler		1.525	mg	supplier	glass	Fibrous-Glass-Wool	65997-17-3		1.483	mg	972459	81484				
				supplier	coating	TITANIUM OXIDE (Ti3O5)	12065-65-5		0.014	mg	9180	769				
				supplier	ceramic	Quartz (SiO2)	14808-60-7		0.021	mg	13771	1154				
				supplier	coating	Silicon	7440-21-3		0.007	mg	4590	385				
				supplier	polymer	1,4-Benzenedicarboxylic acid, polymer with 2-m	169284-22-4		2.371	mg	549988	130274				
Cap housing		4.311	mg	supplier	polymer	Carbon Black	1333-86-4		0.216	mg	50104	11868				
				supplier	polymer	Filler Calcium Silicate	13983-17-0		1.724	mg	399908	94725				
				supplier	die	Gallium Arsenide	1303-00-0		0.016	mg	842105	879				
VCSEL Caesar	M-010 Ceramics / glass	0.019	mg	supplier	metallization	Titanium	7440-32-6		0.002	mg	105263	110				
				supplier	metallization	Germanium	7440-56-4		0.001	mg	52632	55				
Liner		2.200	mg	supplier	polymer	Polyimide film	62929-02-6		1.430	mg	650000	78571				
				supplier	polymer	2-Propenoic acid, 2-methyl-, butyl ester, poly	24938-16-7		0.770	mg	350000	42308				
Glue cap to glass and substrate	M-015 Other organic materials	0.091	mg	supplier	glue	Diglycidyl bisphenol F	39817-09-9		0.043	mg	472528	2363				
				supplier	glue	Tetrafluoroethylene	9002-84-0		0.027	mg	296703	1484				
				supplier	glue	Epoxypropoxy butane polymer	2425-79-8		0.014	mg	153846	769				
				supplier	glue	Silica vitreous	60676-86-0		0.001	mg	10989	55				
				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.004	mg	43956	220				
				supplier	glue	Carbon black	1333-86-4		0.001	mg	10989	55				
				supplier	glue	Titanium oxide	13463-67-7		0.001	mg	10989	55				